

NSTA National Convention in Seattle  
April 6-9, 1989

Room Request Form

This form should be used to request space for business meetings, committee meetings, and catered functions which you would like to hold at the Seattle National Convention. Please complete (one form per event) all blank spaces applicable to your request.

Meeting \_\_\_ Coffee Social \_\_\_ Reception \_\_\_ Breakfast \_\_\_  
Luncheon \_\_\_ Other \_\_\_ (please specify)

After receiving notification of room assignments, groups requesting coffee socials and/or receptions should contact the hotel catering office directly to make the desired arrangements for the event and payment. NSTA will make the arrangements and sell tickets for breakfasts and luncheons, such as the NSSA/AETS and CESI/NSTA Luncheons, etc.

HOW SHOULD WE LIST YOUR FUNCTION? \_\_\_ List in program appendix  
\_\_\_ Do not publish

NAME OF GROUP/COMMITTEE \_\_\_\_\_  
(1st choice) DAY \_\_\_\_\_ DATE \_\_\_\_\_ TIME \_\_\_\_\_ AM/PM to TIME \_\_\_\_\_ AM/PM  
(2nd choice) DAY \_\_\_\_\_ DATE \_\_\_\_\_ TIME \_\_\_\_\_ AM/PM to TIME \_\_\_\_\_ AM/PM

ESTIMATED ATTENDANCE \_\_\_\_\_ HEAD/SPEAKERS TABLE for \_\_\_\_\_ (number of ) \_\_\_\_\_  
Private function (by invitation only) \_\_\_ Open to all interested \_\_\_

ROOM SETUP DESIRED: (not applicable to social functions)  
Conference Style \_\_\_ Classroom Style \_\_\_ Theater Style \_\_\_

NAME AND ADDRESS OF PERSON SUBMITTING THIS REQUEST:  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
Daytime Phone (\_\_\_\_\_) \_\_\_\_\_  
Date of Request \_\_\_\_\_

PLEASE RETURN THIS FORM TO THE FOLLOWING ADDRESS BY MONDAY, JUNE 13, 1988:

Dina Weiss  
Associate Director of Conventions  
National Science Teachers Association  
1742 Connecticut Avenue, NW  
Washington, DC 20009

CONVENTION DATES: Wed Thurs Fri Sat Sun  
April 5 6 7 8 9

ORDER OF BUSINESS

NARST AWARDS LUNCHEON  
April 12, 1988

Luncheon

|   |               |
|---|---------------|
| Introduction of Head Table                            | Pat Blosser   |
| NARST Awards  | Fred Finley   |
| JRST Awards   | John Staver   |
| Distinguished Contributions Award                     | Mike Padilla  |
| Recognition of Retiring Board<br>Members              | Linda DeTure  |
| Recognition of Past President                         | Linda DeTure  |
| Introduction of President for<br>presidential address | Jim Barufaldi |
| Presidential Address                                  | Linda DeTure  |
| Adjournment   | Linda DeTure  |



COUNCIL FOR  
ELEMENTARY  
SCIENCE  
INTERNATIONAL

**President**

Linda Froschauer  
Weston Middle School  
Weston, CT 06883

**President - Elect**

Walter Smith  
205 Baily Hall  
Kansas University  
Lawrence, KS 66045

**Retiring - President**

Leon Ukens  
Physics Department  
Towson State University  
Towson, MD 21204

**Secretary - Treasurer**

Robert Burtch  
J.B. Nelson School  
Batavia, IL 60510

**Recording Secretary**

Miram Buckland  
K.T. Murphy School  
Stamford, CT 06902

**Directors**

Carolyn Blanding 1985 - 88  
14693 Longacre  
Detroit, MI 48227

Philip C. Parfitt 1985 - 88  
Museum of Science and Industry  
57th and Lake Shore Drive  
Chicago, IL 60637

Timothy Cooney 1986 - 89  
Malcolm Price Laboratory School  
University of Northern Iowa  
Cedar Falls, IA 50613

Betty Graham 1986 - 89  
E J Martinez Elementary School  
Sante Fe, NM 87501

Charles Barman 1987 - 90  
Indiana University  
Indianapolis, IN 46223

Donna Oliver 1987 - 90  
Clarion University  
Peirce Science Center  
Clarion, PA 16214

**NSTA Representative**

Bonita Talbot  
Excelsior Elementary School  
441 Oak Street  
Excelsior, MN 55331

**CESI News Co-Editors**

Audrey Brainard  
14 Glenn Way  
Holmdel, NJ 07733

Denise Hilyard  
William R. Satz School  
Crawford Corner, Everett Road  
Holmdel, NJ 07733

May 15, 1988

To: Division Affiliate Presidents

From: Linda Froschauer *L.F.*

Subject: Address changes/additions

Please replace the second page of the Division Affiliates' address listing provided in the last mailing with the one enclosed. NSSA now has a position called "National Director". Ken Roy has asked that he be placed on your mailing list.

If you have additons or changes for the mailing list, please send them to David Kennedy. It is beneficial to have home addresses and phone numbers. I didn't have many of them when I prepared the initial listing. David will make further updates and provide you with a new list, if necessary, when you meet this summer.

---

**EXECUTIVE SECRETARY**

Dr. Glenn Markle  
NARST  
University of Cincinnati  
Cincinnati, OH 45221-0002  
(513) 475-2335

---

Organized to improve science teaching—through research

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# NARST

NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

---

---

**PRESIDENT**

Dr. Linda DeTure  
Education and Human Development  
Rollins College  
Winter Park, FL 32789

---

**PRESIDENT-ELECT**

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

May 24, 1988

---

**IMMEDIATE PAST PRESIDENT**

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

Dear Pat:

Now that the dust has settled a bit from the 61st Annual Meeting and from the term here at Rollins, I wanted to take a moment to thank you for all your hard work this year. Your support during my year as president was greatly appreciated. It was very reassuring to know I could count on you for your advice and good judgement.

---

**BOARD MEMBERS-AT-LARGE**

Dr. Charles Anderson (1990)  
College of Education  
Michigan State University  
East Lansing, MI 48824

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

Dr. Fred Finley (1990)  
Curriculum and Instruction  
University of Minnesota  
Minneapolis, MN 55455

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

Dr. Mary Budd Rowe  
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

NARST is a better organization because of your efforts. Many thanks for contributing your time, energy, and talent on its behalf. It was my pleasure to be able to work with you as always.

I look forward to seeing you in Little Rock, in the fall. Let me know how I can help. Hope you have a chance to catch your breath and have a pleasant summer.

Warm regards,



Linda R. DeTure

---

**JOURNAL EDITOR**

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

---

**RESEARCH COORDINATOR**

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

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**NARST-NEWS EDITOR**

Dr. Thaddeus W. Fowler (1989)  
University of Cincinnati  
Cincinnati, OH 45221-0002

EXECUTIVE SECRETARY

Dr. Glenn Markle  
NARST  
University of Cincinnati  
Cincinnati, OH 45221-0002  
(513) 475-2335

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NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

PRESIDENT

Dr. Linda DeTure  
Education and Human Development  
Rollins College  
Winter Park, FL 32789

March 26, 1988

Dr. David P. Butts  
145 Deerfield Road  
Bogart, GA 30622

PRESIDENT-ELECT

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

Dear Dave:

I would like to invite you to continue to serve as the NARST representative to the International Council of Associations for Science Education, if you are willing to continue to do so. It seems appropriate that NARST have some continued contact with ICASE and, in my opinion, this is best accomplished by having an individual serve in this position for several years.

IMMEDIATE PAST PRESIDENT

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

Please let me know no later than April 1 if you are willing to continue to accept this responsibility. You may telephone the ERIC Center (614-292-6717/6718) and leave a message for me, or call me at home (614-486-9365).

BOARD MEMBERS-AT-LARGE

Dr. Charles Anderson (1990)  
College of Education  
Michigan State University  
East Lansing, MI 48824

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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

If I am out walking, my answering machine will take your message. I have my second stress test scheduled for April 4 to see if I am recuperated enough to return to work. (I could have taken it earlier, by a couple of days, but some doctoral exams are scheduled for which I am a committee member.)

Sincerely,

*Pat Blosser*

Patricia E. Blosser  
President-elect, NARST

JOURNAL EDITOR

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

*P.S. My regards to Velma.*

RESEARCH COORDINATOR

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

*Thanks for the invitation - and I'll be pleased to accept. Velma still has her nest - and hopes an easy letter!*  
*Pat*

NARST-NEWS EDITOR

Dr. Thaddeus W. Fowler (1989)  
University of Cincinnati  
Cincinnati, OH 45221-0002

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EXECUTIVE SECRETARY

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Dr. Patricia E. Blosser  
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The Ohio State University  
Columbus, OH 43210-1172

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IMMEDIATE PAST PRESIDENT

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

---

To: NARST executive Board  
From: Linda R. DeTure  
Re: Board Books  
Date: March 25, 1988

BOARD MEMBERS-AT-LARGE

Dr. Charles Anderson (1990)  
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Michigan State University  
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Dept. of Curriculum and Instruction  
Kansas State University  
Manhattan, KS 66506

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Please find enclosed the Board Book for the spring meeting. Since this will be an afternoon meeting, we will have to move through reports quickly. Be sure to read the reports and have questions or issues ready for discussion.

Hope to see you in St. Louis. Don't forget to come by the NARST Booth at NSTA and sign up for a couple of hours.

Take care and " HAPPY EASTER ! "

JOURNAL EDITOR

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

---

*Pat.  
See you soon  
Linda*

RESEARCH COORDINATOR

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

---

NARST-NEWS EDITOR

Dr. Thaddeus W. Fowler (1989)  
University of Cincinnati  
Cincinnati, OH 45221-0002

4/10/88 LDU

JB, DB, LD to Costa Rica

affiliate doc. - aff. pres. not eligible for Et & L NSTA

Disc newsletter - announcement re. Search

SF: Holiday Inn - Union Square  
double \$120/night  
single \$107/night

Wed PM (same room) - R-F-Sat

Paper to  
Jim  
Coman.

Markle - stud. rates - keep at \$70 + subsidize or have  
stud. rate float w/conty. site expenses

1990 - Atlanta - downtown hotels

1991 - Chi - Pleasant Run

Jim Coman

Markle - item 7 - wants to purchase hardware & software  
(printers, etc.)

7.7 re Delta - Butts

Howe - ERIC

Receipt 57,900 Exp 53,900

5804.62 1/88

5891.36 12/88

- 2200

Jim Ala - insurance sit. investigated further

Pub dev - RB moved Good's proposal

RB - no action

ICASE - yikes sent to ERIC (see Rita)

Awards Steering Committee  
~~need candidates~~

JRST

NARST awards - add 2 intro.  
item 5 - not decided

2nd regional grp. - \$100<sup>00</sup> - admission (motion tabled)  
— Old business

Journal contract - Ok, signed & ff (1/88 - 1/93)

Play committee - ? - fall bd mtg  
PB - LJ - BH - ?

4/12

PB - check on room cost at club

Fin. Adv.

- issue: change fiscal year to July 1 - June 30  
liability insurance  
next exp (reserve acct. c. \$5000)

Rec - budget needs to be dev'd for fastback series  
\$1500 min. cost

Rec - set aside 5% of <sup>gross</sup> revenue or min of \$1000 bank <sup>2% budget</sup> + \$70,000

~~2% min~~

keep grad stud & emeritus at same rate

risk capital not available

transition fund for office of st. reg. (in 24 yrs.)  
set aside (\$3,000) \$1500 → <sup>Dec. 1987</sup>

Publ. Adv. - need for fastback authors

Rec: of \$1500 for fastback series

Prog. - discussion of events

Policy Adv. - handbook (risk)

Research Kballa - att  
Lomas - call sin labs

fastback topics - Learning cycle model  
class mgmt

Electrons - list, but add name

NARST - 3 add'l comm. needed 8-12

Rec - (award in pub. Prctg. - no ties)

Winner - 10 sessions

IRST - who on - who off - when  
ties - "not of a mind to choose one"  
announce names of winners in next issue - Bd says no

Inst. Contrib

Inst. Comm - rpt. Pam F. A, chair now -  
abstracts - UGA  
wanted \$100 - no action now  
Rec - 3rd consult.

Ad hoc Comm. Liaison

Old Business (Dec. 2+3)

May - Fri 9-5 } call Pat Glover re. times  
Bd - Sat 8-4 } for Ron B.  
Pat B (2)

list of issues - July

↓  
July 15 (return)

↓  
Oct 1

Search Comm - Dec. newsletter (announcement)  
report for fall bd. mty. on procedures for  
search & selection

**SCST - Society for College Science Teachers**

**President**

William Frase  
University College  
ML, #47  
University of Cincinnati  
Cincinnati, OH 45221  
513/ 475-3551

8443 Shuman Lane  
Cincinnati, OH 45231

513/ 931-9289

**President-Elect**

Ted Lopushinshy  
Michigan State University  
100 N. Kedzie Lab MSU  
East Lansing, MI 48824  
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517/ 398-8942

**Executive Secretary**

Eleanor D. Siebert  
Department of Physical Science and Math  
Mt. St. Mary's College  
12001 Chalon Road  
Los Angeles, CA 90049  
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213/ 398-8942

**Newsletter Editor**

Karen Johnston  
Department of Physics  
Box 8202  
North Carolina State University  
Raleigh, NC 27695-8202  
919/ 737-2011

**SCST - Society for College Science Teachers**

**President**

William Frase  
University College  
ML, #47  
University of Cincinnati  
Cincinnati, OH 45221  
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8443 Shuman Lane  
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**Newsletter Editor**

Karen Johnston  
Department of Physics  
Box 8202  
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Raleigh, NC 27695-8202  
919/ 737-2011



Department of Educational Studies:  
Humanities, Science,  
Technological, and Vocational

Science Education  
249 Arps Hall  
1945 North High Street  
Columbus, OH 43210-1172  
Phone 614-292-5381

April 20, 1988

Anton E. Lawson  
Department of Zoology  
Arizona State University  
Tempe, AZ 85287

Dear Tony:

Thank you for chairing the networking session on constructivism research at the NARST meeting, April 11. I was pleased that so many of the NARST members came to the session and participated. The discussions I heard provided evidence that NARST should continue this activity.

I hope you, or some other individual in your networking group, will report to NARST members through the NARST newsletter. Ted Fowler will give us column space. If each networking group could contribute a paragraph or two, there should be copy for several issues. If you cannot meet Ted's May 1 deadline for the June issue, perhaps you can send him your information for the early Fall issue.

Thank you again for helping get this activity started. I appreciate it!

Sincerely,

A handwritten signature in cursive script that reads 'Pat Blosser'.

Patricia E. Blosser  
President, NARST



Department of Educational Studies:  
Humanities, Science,  
Technological, and Vocational

Science Education  
249 Arps Hall  
1945 North High Street  
Columbus, OH 43210-1172  
Phone 614-292-5381

April 20, 1988

John R. Staver  
College of Education  
Box 4348  
University of Illinois  
Chicago, IL 60680

Dear John:

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Columbus, OH 43210-1172  
Phone 614-292-5381

April 20, 1988

Robert L. Shingley  
168 Chambers Bldg.  
Pennsylvania State University  
University Park, PA 16802

Dear Bob:

Thank you for chairing the networking session on attitudes research at the NARST meeting, April 11. I was pleased that so many of the NARST members came to the session and participated. The discussions I heard provided evidence that NARST should continue this activity.

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249 Arps Hall  
1945 North High Street  
Columbus, OH 43210-1172  
Phone 614-292-5381

April 20, 1988

Gerald L. Abegg  
261 Waltham Street  
Lexington, MA 02173

Dear Jerry:

Thank you for chairing the networking session on microcomputers research at the NARST meeting, April 11. I was pleased that so many of the NARST members came to the session and participated. The discussions I heard provided evidence that NARST should continue this activity.

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President, NARST



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249 Arps Hall  
1945 North High Street  
Columbus, OH 43210-1172  
Phone 614-292-5381

· April 20, 1988

Carl Berger  
1110 School of Education  
University of Michigan  
Ann Arbor, MI 48109

Dear Carl:

Thank you for chairing the networking session on microcomputers research at the NARST meeting, April 11. I was pleased that so many of the NARST members came to the session and participated. The discussions I heard provided evidence that NARST should continue this activity.

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249 Arps Hall  
1945 North High Street  
Columbus, OH 43210-1172  
Phone 614-292-5381

· April 20, 1988

Arthur L. White  
Educational Studies  
249 Arps Hall  
1945 N. High Street  
Campus

Dear Art:

Thank you for chairing the networking session on international science education research at the NARST meeting, April 11. I was pleased that so many of the NARST members came to the session and participated. The discussions I heard provided evidence that NARST should continue this activity.

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Columbus, OH 43210-1172  
Phone 614-292-5381

April 20, 1988

James J. Gallagher  
2136 Riverwood Drive  
Okemos, MI 48864

Dear Jim:

Thank you for chairing the networking session on classroom research at the NARST meeting, April 11. I was pleased that so many of the NARST members came to the session and participated. The discussions I heard provided evidence that NARST should continue this activity.

I hope you, or some other individual in your networking group, will report to NARST members through the NARST newsletter. Ted Fowler will give us column space. If each networking group could contribute a paragraph or two, there should be copy for several issues. If you cannot meet Ted's May 1 deadline for the June issue, perhaps you can send him your information for the early Fall issue.

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Science Education  
249 Arps Hall  
1945 North High Street  
Columbus, OH 43210-1172  
Phone 614-292-5381

April 20, 1988

Kenneth G. Tobin  
Stone Building  
College of Education  
Florida State University  
Tallahassee, FL 32306

Dear Ken:

Thank you for chairing the networking session on classroom research at the NARST meeting, April 11. I was pleased that so many of the NARST members came to the session and participated. The discussions I heard provided evidence that NARST should continue this activity.

I hope you, or some other individual in your networking group, will report to NARST members through the NARST newsletter. Ted Fowler will give us column space. If each networking group could contribute a paragraph or two, there should be copy for several issues. If you cannot meet Ted's May 1 deadline for the June issue, perhaps you can send him your information for the early Fall issue.

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249 Arps Hall  
1945 North High Street  
Columbus, OH 43210-1172  
Phone 614-292-5381

April 20, 1988

Mike U. Smith  
Route 1 Box 32  
Maron, GA 31210

Dear Mike:

Thank you for chairing the networking session on problem solving research at the NARST meeting, April 11. I was pleased that so many of the NARST members came to the session and participated. The discussions I heard provided evidence that NARST should continue this activity.

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Columbus, OH 43210-1172  
Phone 614-292-5381

· April 20, 1988

Peter A. Rubba  
CE-STS, 165 Chambers Building  
Pennsylvania State university  
University Park, PA 16802

Dear Pete:

Thank you for chairing the networking session on Science/Technology/Society research at the NARST meeting, April 11. I was pleased that so many of the NARST members came to the session and participated. The discussions I heard provided evidence that NARST should continue this activity.

I hope you, or some other individual in your networking group, will report to NARST members through the NARST newsletter. Ted Fowler will give us column space. If each networking group could contribute a paragraph or two, there should be copy for several issues. If you cannot meet Ted's May 1 deadline for the June issue, perhaps you can send him your information for the early Fall issue.

Thank you again for helping get this activity started. I appreciate it!

Sincerely,

Patricia E. Blosser  
President, NARST



Department of Educational Studies:  
Humanities, Science,  
Technological, and Vocational

Science Education  
249 Arps Hall  
1945 North High Street  
Columbus, OH 43210-1172  
Phone 614-292-5381

April 20, 1988

Marianne Betkouski-Barnes  
Education/Curriculum & Instruction  
University of North Florida  
Jacksonville, FL 32216

Dear Marianne:

Thank you for chairing the networking session on memory systems research at the NARST meeting, April 11. I was pleased that so many of the NARST members came to the session and participated. The discussions I heard provided evidence that NARST should continue this activity.

I hope you, or some other individual in your networking group, will report to NARST members through the NARST newsletter. Ted Fowler will give us column space. If each networking group could contribute a paragraph or two, there should be copy for several issues. If you cannot meet Ted's May 1 deadline for the June issue, perhaps you can send him your information for the early Fall issue.

Thank you again for helping get this activity started. I appreciate it!

Sincerely,

Patricia E. Blosser  
President, NARST



Department of Educational Studies:  
Humanities, Science,  
Technological, and Vocational

Science Education  
249 Arps Hall  
1945 North High Street  
Columbus, OH 43210-1172  
Phone 614-292-5381

· April 20, 1988

Joseph D. Novak  
Department of Education  
404 Roberts Hall  
Cornell University  
Ithaca, NY 14853

Dear Joe:

Thank you for chairing the networking session on misconceptions research at the NARST meeting, April 11. I was pleased that so many of the NARST members came to the session and participated. The discussions I heard provided evidence that NARST should continue this activity.

I hope you, or some other individual in your networking group, will report to NARST members through the NARST newsletter. Ted Fowler will give us column space. If each networking group could contribute a paragraph or two, there should be copy for several issues. If you cannot meet Ted's May 1 deadline for the June issue, perhaps you can send him your information for the early Fall issue.

Thank you again for helping get this activity started. I appreciate it!

Sincerely,

Patricia E. Blosser  
President, NARST

1988 NARST FINANCIAL RECORDS: MONTHLY SUMMARY

| 1988      | Initial<br>Balance | Receipts | Expenditures | Final Balance |
|-----------|--------------------|----------|--------------|---------------|
| January   | 8180.36            | 18397.80 | 2976.35      | 23601.81      |
| February  | 23601.81           | 9272.63  | 964.95       | 31909.49      |
| March     | 31909.49           | 15638.50 | 380.98       | 47167.01      |
| April     | 47167.01           | 5397.23  | 8408.31      | 44155.93      |
| May       | 44155.93           | 2408.00  | 1020.58      | 45543.35      |
| June      | 45543.35           | 2912.05  | 12354.02     | 36101.38      |
| July      | 36101.38           | 1312.00  | 1017.83      | 36395.55      |
| August    | 36395.55           |          |              | 36395.55      |
| September | 36395.55           |          |              | 36395.55      |
| October   | 36395.55           |          |              | 36395.55      |
| November  | 36395.55           |          |              | 36395.55      |
| December  | 36395.55           |          |              | 36395.55      |
| Summary   | 8180.36            | 55338.21 | 27123.02     | 36395.55      |

1988 Spring Meeting of the Executive Board  
National Association for Research in Science Teaching  
Lake Ozark, MO  
April 10, 1988

MINUTES

Board Members in Attendance

|                      |                   |
|----------------------|-------------------|
| Dr. Charles Anderson | Dr. Ronald Good   |
| Dr. James Barufaldi  | Dr. Glenn Markle  |
| Dr. Patricia Blosser | Dr. John Staver   |
| Dr. Roger Bybee      | Dr. Russell Yeany |
| Dr. Linda DeTure     | Dr. Emmett Wright |
| Dr. Fred Finley      |                   |

Others in Attendance:

Dr. Lowell Bethel  
Dr. William Holliday  
Dr. Robert Sherwood

- A. Opening Remarks by the President  
B. Approval of Minutes Describing the 1987 Fall Meeting

Motion: Moved that the minutes of the November 5, 1987 meeting of the Board be approved. (Good, Staver)

Motion approved.

- C. President Elect's Report

The President Elect report was presented by Patricia Blosser. The proposed "leadership team" for 1988 was reviewed and the membership discussed by the Board. There was some confusion because members of the JRST Awards Committee were listed with another committee. This will be corrected and a clean listing of the 1988 leadership team will be distributed to the Board through the NARST News.

Motion: Moved that the President Elect's report be accepted. (Good, Yeany)

Motion carried.

D. President's Report

Linda DeTure presented the president's report. The various professional meetings at which NARST was represented by the President or her designee included: the NSTA/CAST Conference in San Antonio; the 2nd Regional Consultation for Research in Science and Mathematics Education in San Jose, Costa Rica; the NSTA Winter Board Meeting in Washington, D.C.; and the NSTA Board Meeting in St. Louis.

Linda reported that the affiliate guidelines and policy document presented to the NSTA by the Affiliate Committee was generally approved as presented; an exception was the proposal that affiliate presidents be eligible to serve on the NSTA Executive Committee, a proposal that was rejected by the Board. The reason for rejecting the proposal was the concern that the NSTA Board could be controlled by members not elected by the NSTA membership.

Linda expressed strong support for the NARST booth at NSTA. She believes the service provided to practicing teachers through the booth is well worth the cost. Linda thanked members of the Board who donated time at the booth during the NSTA meeting.

Linda stressed the importance of bringing our policies and practices into agreement. Work is continuing on the NARST Policy and Procedures Handbook. Linda invited members of the Board to review the current draft of the Handbook, to write revisions and additions directly onto the draft, and to make suggestions for changes (especially the format). Members of the Board, committee chairpersons, and others who have not submitted descriptions of their responsibilities and approaches should do so as soon as possible.

A search committee for the new Journal editor has been formed and nominations are being accepted. The search committee is Ron Anderson, Chair; John Staver; and Marianne Betkouski. They will report to the Board at the Fall meeting.

Future NARST conference sites were identified as San Francisco (1989); Atlanta (1990); Chicago (1991); and Boston (1992). We will continue alternating our meetings between NSTA and AERA.

**Motion: Moved that the President's Report be accepted.  
(Blosser, Barufaldi)**

**Motion Carried.**

E. Past President's Report

The Past President's report was presented by Jim Barufaldi.

The Past President served as the chair of the Elections Committee and the Policy Advisory Committee during 1987. He submitted materials to be included in the Policy Handbook and presented a NARST-supported paper at the NSTA Area Convention in San Antonio. In addition, Jim represented NARST with Linda DeTure and David Butts at the Second Regional Consultation in Science and Mathematics Education Research in San Jose, Costa Rica where he presented the paper, "Issues and Concerns in Implementing Change in Science Education."

Motion: Moved that the Past Presidents report be accepted.  
(Bybee, Good)

Motion Carried.

F. Executive Secretary's Report

Glenn Markle presented the Executive Secretary's report.

The following members were recommended for Emeritus Status:

- Roy Allison (Penn State)
- Gene Deady (California State in Chico)
- George Mallison (Western Michigan)
- Jacqueline Mallison (Western Michigan)
- John Renner (University of Oklahoma)
- David Redfield (Florida State)
- Richard Smith (San Jose State, California)
- Duane Smith (Penn State, Capitol Campus)
- Frank X. Sutman (Fairleigh Dickerson).

Motion: Moved that the recommended candidates be approved for emeritus status. (Anderson, Wright).

Motion carried.

Markle proposed that the Board begin planning for the transition to a new executive secretary. The current term ends on December 31, 1989. Markle suggested that NARST purchase a hardware system that would ease the transfer of information from one Executive Secretary to the next. Ron Good suggested that hardware might not be a problem, that the next Executive Secretary might have all the hardware needed but have other requirements to enable a smooth transition. He suggested that funds be set aside between now and 1990 but that the funds be ear-marked as transition funds without specifying how they would be spent.

**Motion:** Moved that the Finance Committee consider the proposal to establish a fund to aid in the transition from one executive secretary to the next. Recommendations are needed concerning the size and restrictions on such a fund. (Finley, Staver).

**Motion carried.**

Markle reported that the financial report included in the Board packet was incomplete and that a complete report on the 1987 receipts and expenditures will be mailed to all Board members in the near future. In summarizing the financial status, Markle reported that in spite of increases in dues and registration fees, memberships are running ahead of last year and the conference registrations are exceeding expectations. However, we spent about three thousand dollars more last year than we took in and the balance at the end of the year was only about three thousand dollars. We need to carefully construct the 1989 budget so that receipts exceed expenditures so that we can begin to build a cushion in the event of unanticipated expenses or a drop in membership.

**Motion:** Moved that the Executive Secretary's report be accepted. (Staver, Wright)

**Motion carried.**

G. Financial Advisory Committee

The Financial Advisory Committee report was presented by John Staver. Three issues were discussed: liability insurance, disclaimers on NARST materials to reduce our liability, and the value of the NARST booth at NSTA relative to the cost of operating the booth. After discussion, the matter of liability insurance was routed to the next Financial Advisory Committee for their consideration and recommendation (Staver will continue to work with Wright on this matter); disclaimers may be okay but they will not absolve us of liability if our negligence results in damage to someone; and the NARST booth at NSTA seems like a good thing to continue.

**Motion:** Moved that the Financial Advisory Committee's report be accepted. (Yeany, Bybee)

**Motion carried.**

H. Publication Advisory Committee

The Publication Advisory Committee report was presented by Ron Good. The focus of the discussion was the proposed "fast back" series that would be directed toward members of NARST and other researchers interested in science education. Ron and Andy Anderson each provided a set of ideas about the fast back series. The sense of the Board was that publishing these materials may be risky -- we could lose money on this venture -- but that the potential benefits outweighed the risks involved. Publishing commissioned papers summarizing the research in a specific area in JRST was not generally supported by the Board.

Motion: Moved that the Publication Committee proceed on the fast-back. The publication is to be produced during the coming year. Topics and authors need to be identified and publication be prepared as a separate publication, printed and distributed by NARST at the 1989 Annual Meeting. (Bybee, Wright)

After a extended discussion of the mechanics and procedures for preparing a fast back and of several concerns (use of grant funds or other external support to assist with the cost; channels for distribution of the fast back; will the materials be cited and thereby improve the status of the publication; and use of the publication to further "establish" science education research as a profession), the question was called.

Motion carried.

Motion: Moved that the report of the Publication Advisory Committee be accepted. (Staver, Anderson)

Motion carried.

I. Policy Advisory Committee

The report of the Policy Advisory Committee was presented by Jim Barufaldi. The Committee had no recommendations at this time.

Motion: Moved that the Policy Advisory Committee report be accepted. (Good, Anderson)

Motion carried.

J. Program Committee

The Program Committee report was presented by Patricia Blosser who commended the Program Committee for its efforts during the past year. The 1988 program included approximately two-hundred-fifty presenters and presiders in concurrent sessions, poster sessions, symposia, paper sets, workshops, general sessions, and special sessions (networking groups).

The Board expressed its satisfaction with the program and its appreciation to Pat and the Committee for their efforts. The "Networking Groups," a new feature on the program was recognized as an addition that would be worthwhile to continue in the future.

**Motion:** Moved that the Program Committee report be accepted. (Yeany, Markle)

Motion carried.

K. Research Committee

The report of the Research Committee was presented by Roger Bybee. The job descriptions for the Research Coordinator and the Research Committee have been completed and forwarded to President DeTure. Arrangements were completed for the following NARST-sessions presentations at upcoming NSTA meetings:

|                           |                     |                 |
|---------------------------|---------------------|-----------------|
| Pat Blosser               | Laboratory          | Little Rock, AK |
| Bill Robertson            | Conceptual Learning | Portland, ME    |
| Bill Kyle & Jim Shymanski | Misconceptions      | Charleston, SC  |
| Jim Ellis                 | Microcomputers      | Columbus, OH    |

Two issues of Research Matters were published this year; two more were commissioned and should be completed in the near future. The authors of the completed manuscripts are William Robertson and Dale Baker.

The NARST column in the Journal of College Science Teaching is edited by Linda Crow who is doing an excellent job. NARST will be clearly identified as sponsoring this column in future issues of JCST.

**Motion:** Moved that the Research Committee report be accepted. (Finley, Wright)

Motion carried.

L. Elections Committee Report

The report of the Elections Committee was presented by Jim Barufaldi after all non-Board members were excused. Some questions had been raised about the timely fashion in which ballots had been distributed to members and whether the by-laws had been followed in the 1988 elections. Markle reported the following:

the NARST Bylaws state that

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

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

The date of the 1988 Annual Meeting was April 10, 1988. In January 1988, election materials were prepared to be mailed to 763 members who had paid 1987 dues or were emeritus/life members. A list of members receiving ballots is available for review. Ballots were printed on post-cards which were pre-addressed to Jim Barufaldi, chairperson of the Elections Committee. On February 1, 1988 a set of Cheshire mailing labels and unsealed envelopes containing the ballots, material describing the candidates, and a letter to members was delivered to the University of Cincinnati post office. The post office has a machine which glues labels onto and then seals envelopes. The post office was directed to mail all election materials first-class. I checked with the post office on February 9 and was told that the material had been mailed. At that time I learned that materials addressed with a U.S. zip code had been mailed third-class and all others had been mailed first class. I received my ballot on or about 16 February 1989.

Jim Barufaldi reported that 276 ballots were received by last date to receive ballots (which was set at March 11 because ballots were coming in at a goodly rate early in March. Jim made this decision after consulting with the

President, members of the Board, and the Executive Secretary). The number of ballots counted was about twice that counted in 1987. Several ballots were received after the closing date, but had they been counted, the results would have been the same.

President DeTure stated that she was aware of reports that some members had not received ballots in time to vote, but that after consideration of the events and the information reported above, had decided that election had been conducted within the by-laws and that the results should stand.

The Board agreed with the President's decision, but instructed the Executive Secretary to assure that future ballots be mailed first-class and that a notice be placed in the NARST News alerting members that ballots are coming and directing them to notify the Executive Secretary if they have not received their ballot by a specified date. All agreed that it was a misfortune that during a year in which we had such a strong field of candidates, that the mailing of ballots had been third class and that some members had not received their ballots in time to cast a vote.

The newly elected officers are:

|                   |                     |
|-------------------|---------------------|
| William Holliday, | President Elect     |
| Lowell Bethel     | Board Member (1991) |
| Robert Sherwood   | Board Member (1991) |

Motion: Moved that the report of the elections committee be accepted. (Staver, Bybee)

Motion carried.

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

Jack Holbrock presented an enlightening report on the goals and purposes of ICASE and how ICASE serves NARST and science education in general. He distributed materials describing activities and publications of ICASE and answered questions about the organization.

Ron Good expressed surprise that the ICASE operation was not more widely understood, even within NARST which has been a member of ICASE for several years.

The Board suggested that communications could be improved if the NARST News editor received ICASE information in addition to our ICASE representative (currently David Butts, generally the past president). Jack indicated that this was possible, and seemed to accept the notion at the president,

the executive secretary, and interested members of the Board could also be mailed information.

This presentation helped to make more clear why NARST should continue membership in ICASE. The NARST News should be mailed to the ICASE Executive Secretary:

Dr. Jack Holbrook  
Department of Professional Studies in Education  
University of Hong Kong  
Hong Kong

N. Awards Steering Committee

The report of the Awards Steering Committee was presented by Mike Padilla. John Renner will receive the award for Outstanding Science Educator in 1988.

Mike expressed concern that more nominations are needed for next year and encouraged members of the Board to be more actively involved in seeking and making nominations. Mike will work with Ann Howe, the new chairperson of this committee to assure that information about past nominees is passed on.

Motion: Moved that the Awards Steering Committee report be accepted. (Bybee, Finley)

Motion carried.

O. JRST Awards Committee.

The JRST Awards Committee report was presented by John Staver. There was a three-way tie for the award which John interpreted to mean that a wider variety of research methodologies are now acceptable to NARST reviewers. The winners of the award are:

Ken Tobin and Jim Gallagher

Robert Sherwood, Charles Kinzer, John Bransford,  
and Jeffery Franks

and

Anton Lawson.

Motion: Moved that the report of the JRST Awards Committee be accepted. (Wright, Barufaldi)

Motion carried.

P. NARST Awards Committee

The report of the NARST Awards Committee was presented by Fred Finley. The following winners were announced:

Uri Zoller and Ben Chaim for the Practical Applications Award

and

Kenneth Tobin and Barry Fraser for the Outstanding Paper Award.

Fred announced that a paper nomination form had been distributed at this meeting to encourage more applications. Two issues were discussed: the size of the committee (too many papers to be read by a small committee) and rating versus ranking of papers. There was also discussion about the number of awards. (See the written committee report for more details.)

The discussion of the Board suggested that more readers be added from among those members who have expressed interest in being more involved in NARST. Linda suggested that the Committee bring a recommendation the next Board meeting.

**Motion:** Moved that the NARST Awards Committee report be accepted. (Yeany, Anderson)

Motion carried.

Q. International Committee Report

President DeTure directed attention to the written report of the International Committee (included in the Board Book). Recommendation 7 of the report requests about \$100 to produce 500 copies of the Consultation proceedings in English and Spanish. The Proceedings are like NARST abstracts. Dave Butts had previously indicated that the University of Georgia could manage the printing for about \$100.00

**Motion:** Moved that NARST appropriate \$100.00 to support the printing of the Consultation proceedings in English and Spanish. (Anderson, Barufaldi).

Russell Yeany stated that U.Ga. could pick up the cost of the reproducing the Proceedings and returning them to Pam Frazier, but was uncertain about the NARST endorsement of the materials. The motion was tabled until more information could be collected, but the sense was that U.Ga. would

provide the financial support needed to print the Proceedings.

R. Editors Report

Russell Yeany presented the Editor's report. The Journal is in good shape. The number of manuscripts submitted during the past year was somewhat down, but this was viewed as an opportunity rather than a problem. Perhaps there will be a chance to have some special issues that focus on specific areas of concern.

The new editor will have control of manuscripts to be published after December 31, 1989. Russell will work with authors of manuscripts to be published before that date. There is approximately a one year back-log of manuscripts.

Motion: Moved that the Editor's report be accepted. (Good, Staver)

Motion carried.

S. Written Reports Referenced

Attention was directed to four written reports included in the Board Book:

|                    |                  |     |
|--------------------|------------------|-----|
| NARST Archives     | by Paul Joslin   |     |
| AAAS               | by David Lockard |     |
| ISE Advisory Board | by John Koran    | and |
| Triangle Coalition | by Robert Howe.  |     |

Clarification is needed regarding sending JRST to the African libraries as requested by David Lockard. Linda DeTure will gather additional information about this.

T. Other Old Business

A. Wiley Contract. The contract with Wiley has been signed and they will continue as publishers of the Journal for the next five years. Copies of the contract are available from the Executive Secretary.

U. New Business

A. Planning Sessions. President DeTure expressed the need for the NARST Board to engage in long range planning beyond what can be accomplished at the annual Board meetings and suggested that a day be set aside immediately before or after the Fall Board meeting to engage in planning. Discussion of this matter was delayed until the next Board meeting.

- B. Bit Net Addresses. Bob Sherwood raised the question of using Bit Net as a means for improving communications among NARST members. No action was taken at this time, but the sense was that the use Bit Net to improve communications among us and our members should be explored.
  
- C. President DeTure expressed the appreciation of NARST to John Staver, Jim Barufaldi, and Jane Bowyer for their service on the NARST Board. These members are finishing their terms on the Board.

The Board expressed appreciation to President DeTure for her leadership and service during her term as President of NARST.

The Spring Board meeting adjourned at 5:55 p.m.

EXECUTIVE SECRETARY

Dr. Glenn Markle  
NARST  
University of Cincinnati  
Cincinnati, OH 45221-0002  
(513) 475-2335

Organized to improve science teaching—through research



NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

PRESIDENT

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

PRESIDENT-ELECT

Dr. William G. Holliday  
Science Teaching Center  
The University of Maryland  
College Park, MD 20742

September 8, 1988

*Hi, Glenn -  
will be in touch*

Dear Pat:

IMMEDIATE PAST PRESIDENT

Dr. Linda DeTure  
Education and Human Development  
Rollins College  
Winter Park, FL 32789

I have just arrived back at school after attempting to take the summer off. The last two years have been hectic and disruptive both professionally and personally and I needed some time for myself. As it turns out I worked about half the summer at Rollins after all, but for the most part I did put my NARST business on hold.

BOARD MEMBERS-AT-LARGE

- Dr. Charles Anderson (1990)  
College of Education  
Michigan State University  
East Lansing, MI 48824
- Dr. Lowell J. Bethel (1991)  
Science Education Center—EDB340  
The University of Texas at Austin  
Austin, TX 74712
- Dr. Fred Finley (1990)  
Curriculum and Instruction  
University of Minnesota  
Minneapolis, MN 55455
- Dr. Ronald Good (1989)  
Science Education  
Florida State University  
Tallahassee, FL 32306
- LeMoine Motz (1989)  
NSTA  
1742 Connecticut Avenue, N.W.  
Washington, D.C. 20009
- Dr. Robert Sherwood  
College Box 45, Peabody  
Nashville, TN 37203
- Dr. Emmett Wright (1989)  
Dept. of Curriculum and Instruction  
Kansas State University  
Manhattan, KS 66506

In regard to your request for the concerns generated in the "Hour With..." Session several points were brought up. The purpose of that session was to get a better perspective for what the general membership felt about the role of NARST. As I recall about 12 to 15 members attended. The concerns discussed were as follows:

1. Membership: Who is eligible? Should NARST have different types of memberships? If so, what should they be?
2. Position Statements: Shouldn't NARST have position statements? Suggested they not be political, but informational.
3. Synthesis of Research: NARST should be more actively in developing these.
4. ICASE: Use this organization more for linking with other organizations.
5. Conferences: Publicize in journal, ICASE Newsletter etc. Foreign groups who may not member members need information.
6. Teachers: Bring teachers into organization (as equal members). Make better connections. Look at teacher preparation from research perspective, etc.

JOURNAL EDITOR

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

The "Hour with..." session was to be informational and to provide general membership input for a strategic planning meeting. It was not intended as a means of generating an agenda for a meeting.

RESEARCH COORDINATOR

Dr. Rodger Bybee (1989)  
B.S.C.S  
Colorado College  
Colorado Springs, CO 80903

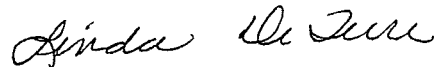
NARST-NEWS EDITOR

Dr. Thaddeus W. Fowler (1989)  
University of Cincinnati  
Cincinnati, OH 45221-0002

I know you are not enthusiastic about having Strategic Planning at the fall meeting and as president it is your prerogative to do it or not. The request for the need for one came from several different board members rather than from the general membership. Before you make a final decision, you may want to poll how the board feels about it.

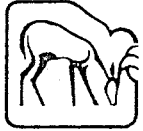
Both Rodger and Glen have had experience with strategic planning. I am enclosing the outlines that Rodger sent. Glen has additional information. Once you have made a decision, let me know what you want me to do. I would like to encourage you to make use of the extra day. I think it would be worth the time and I think the organization needs it.

Sincerely,



Linda R. DeTure

cc: Markle  
Holliday



BIOLOGICAL  
SCIENCES  
CURRICULUM  
STUDY

→ STRATEGIC PLANNING  
(FILE)

1115 NORTH CASCADE AVENUE  
COLORADO SPRINGS, COLORADO 80903  
(303) 473-2233 Ext. 732

South Office:  
830 NORTH TEJON STREET, SUITE 405  
COLORADO SPRINGS, COLORADO 80903  
(303) 578-1136

Agenda  
Strategic Planning Session  
24 November 1987  
BSCS South Office

8:00- 8:15 AM Overview of the strategic planning process

- a. purpose
- b. role of staff and board
- c. timeline

8:15- 8:30 AM Review of agenda and tasks for the day

8:30- 9:00 AM Review of draft summaries from 9 November meeting (work groups)

9:00- 9:45 AM Group discussion of mission statement and elaboration

TECH  
PRINT  
STUDENT  
TECH. & ADM

9:45-10:00 AM Break

10:00-10:15 AM Directions for new work groups: print materials; nonprint materials; research

MAJOR PRODUCTS OF BSCS

10:15-11:45 AM Work groups meet

TECH } PRIMARY GROUPS  
STU }  
ADM }

11:45- 1:00 PM Lunch

1:00- 2:45 PM Work groups meet

2:45- 3:00 PM Break

3:00- 3:30 PM Review of progress ←

3:30- 4:30 PM Continue work on drafts, as necessary (work groups)

(GOAL FOR TODAY)

COMPLETE DRAFT FROM EACH GROUP

GOALS  
OBJECTIVES  
STRATEGIES

1-3-5 YEAR GOALS

→ COMPLETE STATEMENTS  
FOR { STD  
TCH  
ADM

Tasks for work groups on:      print materials  
   nonprint materials  
   research

- CONCISE
1. develop one major goal, keeping in mind the audiences of learners, teachers, and administrators;
  
  2. develop and prioritize the objectives for the major goal, again, keeping in mind the audiences and using the notes from the August meeting as additional background;
  
  3. develop and prioritize the strategies for each objective and key your strategies to the objectives so the relationships are clear; and
  
  4. indicate whether we are to accomplish each objective or strategy in one, three, or five years.

If time permits, propose specific tasks to accomplish the objectives and strategies that have one-year timelines.



AGENDA  
STRATEGIC PLANNING COMMITTEE

20-21 August 1987  
Colorado Springs, Colorado

Thursday, 20 August

8:30- 9:00 AM

Setting the scene (McInerney)

- Why are we here? (the tasks ahead for this strategic planning committee during this session and the weeks ahead in general)
- Who is here and why? (introductions, roles, expectations)
- What is the target? (the specific desired outcomes for this session; e.g., survey device)

9:00- 9:30 AM

Checking semantics, directions (Novak)

- What is planning in general and in specific; i.e., long-range planning, strategic planning, annual planning?
- Why plan?
- Who should plan?
- Why strategic planning must become strategic management and strategic opportunism.
- How can planning be turned into performance?
- How to make sure the plan will be used, evaluated, revised.

9:30-10:15 AM

Group discussion (Novak facilitates)

- What should we cover in this exercise; e.g., mission, niche, name, move to business model...?
- Is anything off limits or inappropriate to cover at this time?

Friday, 21 August

8:30- 9:00 AM

Where are we? (McInerney and Novak)

- What have we achieved at this point, what remains to be done, how close are we to our goal?

9:00-12:00 PM

Presentations by key groups and development of device, list of speakers

- Each key group presents its thoughts on how best to get information on its area of concern via survey device and data sources

(break as needed)

- Gather major ideas and develop into survey device, develop assignment list for staff, identify speakers, as needed

12:00 PM

Closure

- Summary of accomplishments
- Discussion of next steps
- Adjournment

Expenditures as on Notebook #11  
11/2/89

| LAST NAME     | FIRST NAME   | 88 DUES | 88 PAID  | 88 CONF |
|---------------|--------------|---------|----------|---------|
| Allison       | Roy W.       |         | 1988     |         |
| Anderson      | Kenneth A.   |         |          |         |
| Bingham       | N. Eldred    |         |          |         |
| Blackwood     | Paul E.      |         | 1988     |         |
| Blough        | Glen O.      |         |          |         |
| Craig         | Gerald S.    |         |          |         |
| Davis         | George R.    |         |          |         |
| Deady         | Gene M.      | 30.00   | 88/01/17 |         |
| Diehl         | T. Handley   |         |          |         |
| Dutton        | Frederic B.  |         | 1988     |         |
| Fowler        | H. Seymour   |         | 1988     |         |
| Fraser        | Thomas P.    |         | 1988     |         |
| Frazier       | Ralph P.     |         |          |         |
| Goehring, Jr. | Harvey J.    |         | 1988     |         |
| Hurd          | Paul D.      | 30.00   |          |         |
| Ivey          | Marvin L.    |         | 88-00-00 |         |
| Kranzer       | Heman C.     |         | 1988     |         |
| Lefler        | Ralph W.     |         | 1988     |         |
| Lepischak     | Bob          |         |          |         |
| Mallinson     | George G.    | 30.00   | 88/02/01 |         |
| Mallinson     | Jacqueline V |         |          |         |
| Mills         | Lester C.    |         | 1988     |         |
| Nelson        | Clarence H.  |         |          |         |
| Nisbet        | Jerry J.     |         | 1988     |         |
| Olson         | Kenneth V.   |         | 88/00/00 |         |
| Pella         | Milton       |         | 1988     |         |
| Quinn         | Mary Ellen   | 30.00   | 88/02/22 |         |
| Redfield      | David D.     |         |          |         |
| Renner        | John W.      | 30.00   | 88/01/22 | 20.00   |
| Rio           | Francis J.   |         |          |         |
| Roche         | Ruth         |         |          |         |
| Rosen         | Sidney       |         | 1988     |         |
| Ruff          | Heman J.     | 30.00   | 88/01/17 |         |
| Schneider     | Heman        |         | 1988     |         |
| Shoemaker     | Lois M.      |         |          |         |
| Sipe          | Craig        | 30.00   | 88/01/22 |         |
| Smith         | Duane R.     |         | 1988     |         |
| Smith         | Richard A.   | 30.00   | 88/01/17 |         |
| Stollberg     | Robert       |         | 1988     |         |
| Sutman        | Frank X.     | 30.00   | 88/02/22 | 20.00   |
| Tyler         | Ralph W.     | 54.00   | 88/01/17 |         |
| Victor        | Edward       |         |          |         |
| Walsh         | William J.   |         | 1988     |         |
| Washton       | Nathan S.    |         | 1988     |         |
| Watson        | Fletcher     | 30.00   | 88/01/17 |         |
| Weaver        | Allen D.     |         | 1988     |         |

To: NARST Board of Directors  
From: Fred N. Finley  
Re: NARST Awards Committee Report  
Date: March 24, 1988

Item 1

This year the NARST Awards Committee consisted of seven members: Mike Dryden, Mary Atwater, Linda Cronin, Joe Krajcik, Mary Westerback, Mike Piburn, and David Haury. Each is to be commended for their excellent evaluations. There were twelve papers considered for the Outstanding Paper Award and seven papers considered for the Practical Applications Award.

The winners of the Practical Applications Award was Dr. Uri Zoller and Dr. Ben Chaim for their paper titled Interaction Between Examination Type, Anxiety State and Academic Achievement in College Science: An Action Oriented Research. The winners of the Outstanding Paper Award were

Dr. Kenneth Tobin and Dr. Barry Fraser for their paper titled What Does It Mean To Be an Exemplary Science Teacher.

Item 2

At the last board meeting it was suggested that there should be a procedure by which papers could be nominated for consideration. That has been done. The procedure is that anyone who had seen a paper they thought was particularly good would obtain a form at the registration desk on which they will indicate the paper title and author. After the annual meeting I will write a note to those who are nominated suggesting that they might submit their paper. This procedure is not intended to replace the one that is already in place and these papers will receive NO special consideration. It is only an attempt to increase the number and quality of papers submitted.

Item 3

During the review process this year I became aware of the fact that the number of papers that reviewers were asked to read is substantial... a total of nineteen this year. This seems like a large number of papers to review with the expectation that the reviews be thorough and detailed. For that reason (and pending the committee's discussion) I am proposing that we (a) add two more members to the NARST Awards Committee which would bring the total to ten and (b) form two five member subcommittees--- one for the Outstanding Paper Award and one for the Practical Applications Award. That would reduce the reading load and allow more time to be spent thoroughly critiquing each paper.

Item 4

Also during this years review, a couple of ambiguities in the procedures for determining the award winner became evident. One ambiguity results from requesting both a score and a rank ordering of the papers. It is possible that a mean score could place paper A higher than paper B while the mean rank would place B higher than A. This ambiguity needs to be resolved. Another ambiguity is that it is now possible that a set of papers could be received in which no paper was "outstanding", but an award still would be made to the highest score or rank. The NARST Awards Committee will consider these problems and prepare a recommendation for consideration at the Fall board meeting.

Item 5

Finally, two policy decisions need to made. A decision is needed as to the number of awards that will be given in each category and whether or not there will be honorable mention awards. Another decision is needed as to whether or not the Practical Applications Award will automatically be recommended. Again, the committee will be making recommendations to the board for consideration at the Fall meeting.

---

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NARST  
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Cincinnati, OH 45221-0002  
(513) 475-2335

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**PRESIDENT**

Dr. James P. Barufaldi  
Science Education Center  
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Austin, Texas 78712

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**PRESIDENT-ELECT**

Dr. Linda DeTure  
Education and Human Development  
Rollins College  
Winter Park, FL 32789

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**IMMEDIATE PAST PRESIDENT**

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

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**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  
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LeRoy Lee  
National Science Teachers Association  
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Dr. John Staver (1988)  
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Dr. Emmett Wright (1989)  
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Manhattan, KS 66506

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Athens, GA 30602

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**RESEARCH COORDINATOR**

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

---

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# NARST

NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

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## Report of Immediate Past President

James P. Barufaldi

This past year has been a reflective time for me in the Association. Under the fine leadership of President De Ture and the meaningful, high level of productivity of Board members; NARST continues to play an integral role in research in science education. NARST members are active in all phases of research, both at the national and international levels. The quality of our product is providing the impetus for continued improvement in science education. New images are emerging as a result of numerous exemplary endeavors.

### Activities:

1. Chair, Election Committee
2. Chair, Policy Advisory Committee
3. Prepared rough draft of Handbook
4. Prepared rough draft of Handbook section:  
Policy Advisory Committee
5. NARST sponsored paper: "The Role of Manipulative Experiences in Elementary School Science," NSTA Area Convention, San Antonio, TX, November 8, 1987.

DATE: April 6, 1988  
TO: NARST Board of Directors and Officers  
FROM: John R. Staver, Chair, Financial Advisory Committee  
RE: Report of the Financial Advisory Committee

The Financial Advisory Committee (FAC) was unable to meet as of the writing of this report. Members of the Committee will be at the NSTA and NARST meetings, and it is my hope that we can assemble for some discussion prior to the board meeting on Sunday, April 10, 1988. If such a meeting takes place, then an addendum to this report will be filed.

Items of business concern the question of liability insurance. I contacted Daniel A. Byrne of Byrne, Byrne and Company shortly after our November board meeting to investigate further the possibility of obtaining Directors and Officers Liability Insurance for NARST. In January Mr. Byrne sent me some documentation as well as an application form. Due to the details involved in completing the application, I forwarded it to Glenn Markle. When he completes it, I will return the form to Mr. Byrne, who will then be able to quote a premium. It is already known that the annual premium will be in the \$2,000 range. Presently, I am also seeking information from my insurance agent as to the possibility of such coverage through a "professional rider" on an individual's homeowners insurance.

Other business concerns: 1) the outcome of Markle's conversation with an attorney concerning recommendations about NARST obligations and possible disclaimer language for the NARST program; and 2) the result of Markle's negotiations with Bill Aldridge, NSTA Executive Secretary as to the cost to NARST of its booth at the NSTA convention. Both are unknown to me at this time, but I should have answers by the April 10 board meeting.

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Austin, Texas 78712

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BOARD MEMBERS-AT-LARGE

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College of Education  
Michigan State University  
East Lansing, MI 48824

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

Dr. Fred Finley (1990)  
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Minneapolis, MN 55455

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

Dr. Mary Budd Rowe  
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RESEARCH COORDINATOR

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

---

NARST-NEWS EDITOR

Dr. Thaddeus W. Fowler (1989)  
University of Cincinnati  
Cincinnati, OH 45221-0002

To: NARST executive Board  
From: Linda R. DeTure  
Re: Board Books  
Date: March 25, 1988

*Linda R. DeTure*  
*Patricia E. Blosser*

Please find enclosed the Board Book for the spring meeting. Since this will be an afternoon meeting, we will have to move through reports quickly. Be sure to read the reports and have questions or issues ready for discussion.

Hope to see you in St. Louis. Don't forget to come by the NARST Booth at NSTA and sign up for a couple of hours.

Take care and " HAPPY EASTER ! "

6. Represented NARST at the Second Regional Consultation in Science and Mathematics Educational Research, San Jose, Costa Rica. Presented the paper, "Issues and Concerns in Implementing Change in Science Education," December 13, 1987.



22 Waugh Drive, Houston, Texas 77007  
Phone (713) 869-5021

March 14, 1988

Rodger Bybee  
BSCS  
The Colorado College  
Colorado Springs, Colorado

Dear Rodger:

I have included a brief report concerning the Research and Teaching Column in JCST. Along with the one page report I have also attached copies of the columns. I hope this provides enough information for the Research Committee of NARST. If you or any members of the committee have any suggestions concerning this column, please feel free to contact me.

I appreciate the opportunity of serving NARST through this editorship and look forward to future columns. Thanks especially for your help and confidence in me.

Sincerely,

A handwritten signature in cursive script that reads 'Linda W. Crow'.

Linda W. Crow

Research and Teaching Column  
Journal of College Science Teaching

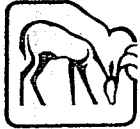
Editor: Linda W. Crow

This column was established and sponsored by NARST to provide educational research information for college science teachers. Whether they have been researched formally or informally, the various issues discussed in this column are designed to lead to practical suggestions for classroom use at the college and university level.

With this purpose in mind, each issue of JCST focused upon research that could be directly related to the college science teacher. It was hoped that this column would also serve as a forum for educational research. The columns for the 1987-1988 year were:

| Date                  | Author         | Title  |
|-----------------------|----------------|--|
| Sept/<br>Oct 1987     | Linda W. Crow  | Is Educational Research Important?   |
| Nov<br>1987           | Robert Allen   | Critical Thinking and Science Teaching   |
| Dec/<br>Jan 1988      | John E. Penick | Teacher and Student Roles in College<br>Science Laboratories                   |
| Feb 1988              | Anton Lawson   | Student Reasoning, Concept Acquisition,<br>and A Theory of Science Instruction |
| Mar/<br>April<br>1988 | Jane B. Kahle  | Women and Minorities in Sciences   |
| May<br>1988           | Linda W. Crow  | Awards, Rewards, and Plans for Research  |

A Research and Teaching Column appeared in each issue of JCST. Next year some changes will be made in the format to include a boxed-in section and perhaps photographs.



BIOLOGICAL  
SCIENCES  
CURRICULUM  
STUDY

1115 NORTH CASCADE AVENUE  
COLORADO SPRINGS, COLORADO 80903  
(303) 473-2233 Ext. 732

*South Office:*  
830 NORTH TEJON STREET, SUITE 405  
COLORADO SPRINGS, COLORADO 80903  
(303) 578-1136

28 March 1988

Dr. Linda Crow  
Houston Community College System  
22 Waugh Drive  
Houston, Texas 77007

Dear Linda:

I have just finished reviewing your report on the JCST column. You have done an excellent job. There is a significant amount of work in the initial stages of establishing such a column.

On behalf of the NARST Board of Directors and the membership, I thank you for your dedication and work on this new endeavor.

Sincerely,

Rodger W. Bybee  
Associate Director

RWB/yw



BIOLOGICAL  
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28 March 1988

Dr. Les Paldy  
Director  
Center for Science,  
Mathematics & Education  
State University of New York  
Stonybrook, NY 11794

Dear Les:

I just reviewed all the Research and Teaching columns for this year. It is clear that you and Linda have established an excellent column. Both the topics and authors are of the highest quality.

I have one concern. I noted that the National Association of Research in Science Teaching (NARST) is not mentioned in any of the columns. Since NARST helped initiate the columns and has supported it through authors and Linda Crow, would it be possible to include a byline indicating the role NARST has played? I am not asking for more credit than NARST has contributed. I am asking for some credit. I understand you are considering a new format for future columns. On behalf of NARST, I ask that you consider some organization recognition and some personal recognition (for Linda's work) in the new format.

Thank you for consideration of this request. If I can be of any assistance in this, please do not hesitate to write or call.

Sincerely,

Rodger W. Bybee  
Associate Director

RWB/yw

cc: Linda DeTure  
Linda Crow

---

EXECUTIVE SECRETARY

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

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**NARST**

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RESEARCH COORDINATOR

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

Report of the NARST Election Committee  
to the NARST Executive Board

Lake Ozark, MO

April 10, 1988

The election of officers for 1988-89 was conducted  
as per policies and procedures prescribed by the by-laws  
of the NARST.

The election results are as follows:

President-Elect: William G. Holliday

Board Members-At-Large: Lowell J. Bethel  
Robert Sherwood

Respectively submitted for the Elections Committee.

James P. Barufaldi, Chair  
Rodney L. Doran  
Stanley L. Helgeson

My Copy Gen

~~Give Feedback To Linda~~  
~~Do time To Pam.~~

## Ad hoc Committee on International Issues.

Present:

Lehman Barnes  
Ribhi Abu-Sneineh  
Jack Holbrook  
Armando Contreras  
Douna Berlin  
Art White  
Juan Esquivel  
Uri Zoller  
John Penick  
Barry Fraser

Linda de Ture  
P. Fraser-Abdel  
Deyanira Barnett

Some conclusions/recommendations that emerged

1. International Survey conducted in the Newsletter
  - a. The questionnaire on international experience to be repeated in the newsletter.
  - b. The results of the survey to be housed at O.S.U persons who require it to send a request to Art White
  - c. The Committee to consider the future use + dissemination of information in the survey. Ideas to be forwarded to P.F.A.
2. Second Regional Consultation
  - a. The proceedings (abstracts in English/Spanish) to be published by the U. of Georgia with the endorsement of NARST.
  - b. The Conference Papers currently on an IBM disc to be housed at O.S.U. interested persons can

obtain a copy from Art White upon request  
and payment for reproduction

### 3. Third Consultation

a. An endorsement from NARST to be requested.

Organizer : Armando Gutierrez

Venue : Merida, Venezuela.

Dates : September 1989 or Feb 1990

### 4. Operating Budget

a) NARST be requested to provide an operating budget to the Committee to assist in communication (see overleaf)

### 5. ICASE Involvement

a) Jack Holbrook offered to assist the Committee in dissemination of information

### b. South American Participation

a) Armando be requested to be the contact (facilitator) person for encouraging participation by South Americans in NARST.

# Operating Budget

Capital

\$100.00

Telephone

Mailing

a) Survey results

b) Conf. proceedings.

c) International networking activities  
eg. directory.

1988 Spring Meeting of the Executive Board  
National Association for Research in Science Teaching  
Lake Ozark, MO  
April 10, 1988

MINUTES

Board Members in Attendance

|                      |                   |
|----------------------|-------------------|
| Dr. Charles Anderson | Dr. Ronald Good   |
| Dr. James Barufaldi  | Dr. Glenn Markle  |
| Dr. Patricia Blosser | Dr. John Staver   |
| Dr. Roger Bybee      | Dr. Russell Yeany |
| Dr. Linda DeTure     | Dr. Emmett Wright |
| Dr. Fred Finley      |                   |

Others in Attendance:

Dr. Lowell Bethel  
Dr. William Holliday  
Dr. Robert Sherwood

- A. Opening Remarks by the President  
B. Approval of Minutes Describing the 1987 Fall Meeting

Motion: Moved that the minutes of the November 5, 1987 meeting of the Board be approved. (Good, Staver)

Motion approved.

- C. President Elect's Report

The President Elect report was presented by Patricia Blosser. The proposed "leadership team" for 1988 was reviewed and the membership discussed by the Board. There was some confusion because members of the JRST Awards Committee were listed with another committee. This will be corrected and a clean listing of the 1988 leadership team will be distributed to the Board through the NARST News.

Motion: Moved that the President Elect's report be accepted. (Good, Yeany)

Motion carried.

D. President's Report

Linda DeTure presented the president's report. The various professional meetings at which NARST was represented by the President or her designee included: the NSTA/CAST Conference in San Antonio; the 2nd Regional Consultation for Research in Science and Mathematics Education in San Jose, Costa Rica; the NSTA Winter Board Meeting in Washington, D.C.; and the NSTA Board Meeting in St. Louis.

Linda reported that the affiliate guidelines and policy document presented to the NSTA by the Affiliate Committee was generally approved as presented; an exception was the proposal that affiliate presidents be eligible to serve on the NSTA Executive Committee, a proposal that was rejected by the Board. The reason for rejecting the proposal was the concern that the NSTA Board could be controlled by members not elected by the NSTA membership.

Linda expressed strong support for the NARST booth at NSTA. She believes the service provided to practicing teachers through the booth is well worth the cost. Linda thanked members of the Board who donated time at the booth during the NSTA meeting.

Linda stressed the importance of bringing our policies and practices into agreement. Work is continuing on the NARST Policy and Procedures Handbook. Linda invited members of the Board to review the current draft of the Handbook, to write revisions and additions directly onto the draft, and to make suggestions for changes (especially the format). Members of the Board, committee chairpersons, and others who have not submitted descriptions of their responsibilities and approaches should do so as soon as possible.

A search committee for the new Journal editor has been formed and nominations are being accepted. The search committee is Ron Anderson, Chair; John Staver; and Marianne Betkouski. They will report to the Board at the Fall meeting.

Future NARST conference sites were identified as San Francisco (1989); Atlanta (1990); Chicago (1991); and Boston (1992). We will continue alternating our meetings between NSTA and AERA.

Motion: Moved that the President's Report be accepted.  
(Blosser, Barufaldi)

Motion Carried.

E. Past President's Report

The Past President's report was presented by Jim Barufaldi.

The Past President served as the chair of the Elections Committee and the Policy Advisory Committee during 1987. He submitted materials to be included in the Policy Handbook and presented a NARST-supported paper at the NSTA Area Convention in San Antonio. In addition, Jim represented NARST with Linda DeTure and David Butts at the Second Regional Consultation in Science and Mathematics Education Research in San Jose, Costa Rica where he presented the paper, "Issues and Concerns in Implementing Change in Science Education."

Motion: Moved that the Past Presidents report be accepted.  
(Bybee, Good)

Motion Carried.

F. Executive Secretary's Report

Glenn Markle presented the Executive Secretary's report.

The following members were recommended for Emeritus Status:

Roy Allison (Penn State)  
Gene Deady (California State in Chico)  
George Mallison (Western Michigan)  
Jacqueline Mallison (Western Michigan)  
John Renner (University of Oklahoma)  
David Redfield (Florida State)  
Richard Smith (San Jose State, California)  
Duane Smith (Penn State, Capitol Campus)  
Frank X. Smith (Fairleigh Dickerson).

Motion: Moved that the recommended candidates be approved for emeritus status. (Anderson, Wright).

Motion carried.

Markle proposed that the Board begin planning for the transition to a new executive secretary. The current term ends on December 31, 1989. Markle suggested that NARST purchase a hardware system that would ease the transfer of information from one Executive Secretary to the next. Ron Good suggested that hardware might not be a problem, that the next Executive Secretary might have all the hardware needed but have other requirements to enable a smooth transition. He suggested that funds be set aside between now and 1990 but that the funds be ear-marked as transition funds without specifying how they would be spent.

Motion: Moved that the Finance Committee consider the proposal to establish a fund to aid in the transition from one executive secretary to the next. Recommendations are needed concerning the size and restrictions on such a fund. (Finley, Staver).

Motion carried.

Markle reported that the financial report included in the Board packet was incomplete and that a complete report on the 1987 receipts and expenditures will be mailed to all Board members in the near future. In summarizing the financial status, Markle reported that in spite of increases in dues and registration fees, memberships are running ahead of last year and the conference registrations are exceeding expectations. However, we spent about three thousand dollars more last year than we took in and the balance at the end of the year was only about three thousand dollars. We need to carefully construct the 1989 budget so that receipts exceed expenditures so that we can begin to build a cushion in the event of unanticipated expenses or a drop in membership.

Motion: Moved that the Executive Secretary's report be accepted. (Staver, Wright)

Motion carried.

G. Financial Advisory Committee

The Financial Advisory Committee report was presented by John Staver. Three issues were discussed: liability insurance, disclaimers on NARST materials to reduce our liability, and the value of the NARST booth at NSTA relative to the cost of operating the booth. After discussion, the matter of liability insurance was routed to the next Financial Advisory Committee for their consideration and recommendation (Staver will continue to work with Wright on this matter); disclaimers may be okay but they will not absolve us of liability if our negligence results in damage to someone; and the NARST booth at NSTA seems like a good thing to continue.

Motion: Moved that the Financial Advisory Committee's report be accepted. (Yeany, Bybee)

Motion carried.

#### H. Publication Advisory Committee

The Publication Advisory Committee report was presented by Ron Good. The focus of the discussion was the proposed "fast back" series that would be directed toward members of NARST and other researchers interested in science education. Ron and Andy Anderson each provided a set of ideas about the fast back series. The sense of the Board was that publishing these materials may be risky -- we could lose money on this venture -- but that the potential benefits outweighed the risks involved. Publishing commissioned papers summarizing the research in a specific area in JRST was not generally supported by the Board.

Motion: Moved that the Publication Committee proceed on the fast-back. The publication is to be produced during the coming year. Topics and authors need to be identified and publication be prepared as a separate publication, printed and distributed by NARST at the 1989 Annual Meeting. (Bybee, Wright)

After a extended discussion of the mechanics and procedures for preparing a fast back and of several concerns (use of grant funds or other external support to assist with the cost; channels for distribution of the fast back; will the materials be cited and thereby improve the status of the publication; and use of the publication to further "establish" science education research as a profession), the question was called.

Motion carried.

Motion: Moved that the report of the Publication Advisory Committee be accepted. (Staver, Anderson)

Motion carried.

#### I. Policy Advisory Committee

The report of the Policy Advisory Committee was presented by Jim Barufaldi. The Committee had no recommendations at this time.

Motion: Moved that the Policy Advisory Committee report be accepted. (Good, Anderson)

Motion carried.

L. Elections Committee Report

The report of the Elections Committee was presented by Jim Barufaldi after all non-Board members were excused. Some questions had been raised about the timely fashion in which ballots had been distributed to members and whether the by-laws had been followed in the 1988 elections. Markle reported the following:

the NARST Bylaws state that

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

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

The date of the 1988 Annual Meeting was April 10, 1988. In January 1988, election materials were prepared to be mailed to 763 members who had paid 1987 dues or were emeritus/life members. A list of members receiving ballots is available for review. Ballots were printed on post-cards which were pre-addressed to Jim Barufaldi, chairperson of the Elections Committee. On February 1, 1988 a set of Cheshire mailing labels and unsealed envelopes containing the ballots, material describing the candidates, and a letter to members was delivered to the University of Cincinnati post office. The post office has a machine which glues labels onto and then seals envelopes. The post office was directed to mail all election materials first-class. I checked with the post office on February 9 and was told that the material had been mailed. At that time I learned that materials addressed with a U.S. zip code had been mailed third-class and all others had been mailed first class. I received my ballot on or about 16 February 1989.

Jim Barufaldi reported that 276 ballots were received by last date to receive ballots (which was set at March 11 because ballots were coming in at a goodly rate early in March. Jim made this decision after consulting with the

J. Program Committee

The Program Committee report was presented by Patricia Blosser who commended the Program Committee for its efforts during the past year. The 1988 program included approximately two-hundred-fifty presenters and presiders in concurrent sessions, poster sessions, symposia, paper sets, workshops, general sessions, and special sessions (networking groups).

The Board expressed its satisfaction with the program and its appreciation to Pat and the Committee for their efforts. The "Networking Groups," a new feature on the program was recognized as an addition that would be worthwhile to continue in the future.

Motion: Moved that the Program Committee report be accepted. (Yeany, Markle)

Motion carried.

K. Research Committee

The report of the Research Committee was presented by Roger Bybee. The job descriptions for the Research Coordinator and the Research Committee have been completed and forwarded to President DeTure. Arrangements were completed for the following NARST-sessions presentations at upcoming NSTA meetings:

|                           |                   |                 |
|---------------------------|-------------------|-----------------|
| Pat Blosser               | Laboratory        | Little Rock, AK |
| Bill Robertson            | Conceptual Lrning | Portland, ME    |
| Bill Kyle & Jim Shymanski | Misconceptions    | Charleston, SC  |
| Jim Ellis                 | Microcomputers    | Columbus, OH    |

Two issues of Research Matters were published this year; two more were commissioned and should be completed in the near future. The authors of the completed manuscripts are William Robertson and Dale Baker.

The NARST column in the Journal of College Science Teaching is edited by Linda Crow who is doing an excellent job. NARST will be clearly identified as sponsoring this column in future issues of JCST.

Motion: Moved that the Research Committee report be accepted. (Finley, Wright)

Motion carried.

President, members of the Board, and the Executive Secretary). The number of ballots counted was about twice that counted in 1987. Several ballots were received after the closing date, but had they been counted, the results would have been the same.

President DeTure stated that she was aware of reports that some members had not received ballots in time to vote, but that after consideration of the events and the information reported above, had decided that election had been conducted within the by-laws and that the results should stand.

The Board agreed with the President's decision, but instructed the Executive Secretary to assure that future ballots be mailed first-class and that a notice be placed in the NARST News alerting members that ballots are coming and directing them to notify the Executive Secretary if they have not received their ballot by a specified date. All agreed that it was a misfortune that during a year in which we had such a strong field of candidates, that the mailing of ballots had been third class and that some members had not received their ballots in time to cast a vote.

The newly elected officers are:

|                   |                     |
|-------------------|---------------------|
| William Holliday, | President Elect     |
| Lowell Bethel     | Board Member (1991) |
| Robert Sherwood   | Board Member (1991) |

Motion: Moved that the report of the elections committee be accepted. (Staver, Bybee)

Motion carried.

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

Jack Holbrock presented an enlightening report on the goals and purposes of ICASE and how ICASE serves NARST and science education in general. He distributed materials describing activities and publications of ICASE and answered questions about the organization.

Ron Good expressed surprise that the ICASE operation was not more widely understood, even within NARST which has been a member of ICASE for several years.

The Board suggested that communications could be improved if the NARST News editor received ICASE information in addition to our ICASE representative (currently David Butts, generally the past president). Jack indicated that this was possible, and seemed to accept the notion at the president,

the executive secretary, and interested members of the Board could also be mailed information.

This presentation helped to make more clear why NARST should continue membership in ICASE. The NARST News should be mailed to the ICASE Executive Secretary:

Dr. Jack Holbrook  
Department of Professional Studies in Education  
University of Hong Kong  
Hong Kong

N. Awards Steering Committee

The report of the Awards Steering Committee was presented by Mike Padilla. John Renner will receive the award for Outstanding Science Educator in 1988.

Mike expressed concern that more nominations are needed for next year and encouraged members of the Board to be more actively involved in seeking and making nominations. Mike will work with Ann Howe, the new chairperson of this committee to assure that information about past nominees is passed on.

Motion: Moved that the Awards Steering Committee report be accepted. (Bybee, Finley)

Motion carried.

O. JRST Awards Committee.

The JRST Awards Committee report was presented by John Staver. There was a three-way tie for the award which John interpreted to mean that a wider variety of research methodologies are now acceptable to NARST reviewers. The winners of the award are:

Ken Tobin and Jim Gallagher

Robert Sherwood, Charles Kinzer, John Bransford,  
and Jeffery Franks

and

Anton Lawson.

Motion: Moved that the report of the JRST Awards Committee be accepted. (Wright, Barufaldi)

Motion carried.

F. NARST Awards Committee

The report of the NARST Awards Committee was presented by Fred Finley. The following winners were announced:

Uri Zoller and Ben Chaim for the Practical Applications Award

and

Kenneth Tobin and Barry Fraser for the Outstanding Paper Award.

Fred announced that a paper evaluation form had been distributed at this meeting to encourage more applications. Two issues were discussed: the size of the committee (too many papers to be read by a small committee) and rating versus ranking of papers. There was also discussion about the number of awards. (See the written committee report for more details.)

The discussion of the Board suggested that more readers be added from among those members who have expressed interest in being more involved in NARST. Linda suggested that the Committee bring a recommendation the next Board meeting.

Motion: Moved that the NARST Awards Committee report be accepted. (Yeany, Anderson)

Motion carried.

Q. International Committee Report

President DeTure directed attention to the written report of the International Committee (included in the Board Book). Recommendation 7 of the report requests about \$100 to produce 500 copies of the Consultation proceedings in English and Spanish. The Proceedings are like NARST abstracts. Dave Butts had previously indicated that the University of Georgia could manage the printing for about \$100.00

Motion: Moved that NARST appropriate \$100.00 to support the printing of the Consultation proceedings in English and Spanish. (Anderson, Barufaldi).

Russell Yeany stated that U.Ga. could pick up the cost of the reproducing the Proceedings and returning them to Pam Frazier, but was uncertain about the NARST endorsement of the materials. The motion was tabled until more information could be collected, but the sense was that U.Ga. would

provide the financial support needed to print the Proceedings.

R. Editors Report

Russell Yeany presented the Editor's report. The Journal is in good shape. The number of manuscripts submitted during the past year was somewhat down, but this was viewed as an opportunity rather than a problem. Perhaps there will be a chance to have some special issues that focus on specific areas of concern.

The new editor will have control of manuscripts to be published after December 31, 1989. Russell will work with authors of manuscripts to be published before that date. There is approximately a one year back-log of manuscripts.

Motion: Moved that the Editor's report be accepted. (Good, Staver)

Motion carried.

S. Written Reports Referenced

Attention was directed to four written reports included in the Board Book:

|                    |                   |
|--------------------|-------------------|
| NARST Archives     | by Paul Joslin    |
| AAAS               | by David Lockard  |
| ISE Advisory Board | by John Koran and |
| Triangle Coalition | by Robert Howe.   |

Clarification is needed regarding sending JRST to the African libraries as requested by David Lockard. Linda DeTure will gather additional information about this.

T. Other Old Business

A. Wiley Contract. The contract with Wiley has been signed and they will continue as publishers of the Journal for the next five years. Copies of the contract are available from the Executive Secretary.

U. New Business

A. Planning Sessions. President DeTure expressed the need for the NARST Board to engage in long range planning beyond what can be accomplished at the annual Board meetings and suggested that a day be set aside immediately before or after the Fall Board meeting to engage in planning. Discussion of this matter was delayed until the next Board meeting.

B. Bit Net Addresses. Bob Sherwood raised the question of using Bit Net as a means for improving communications among NARST members. No action was taken at this time, but the sense was that the use Bit Net to improve communications among us and our members should be explored.

C. President DeTure expressed the appreciation of NARST to John Staver, Jim Barufaldi, and Jane Bowyer for their service on the NARST Board. These members are finishing their terms on the Board.

The Board expressed appreciation to President DeTure for her leadership and service during her term as President of NARST.

The Spring Board meeting adjourned at 5:55 p.m.

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**EXECUTIVE SECRETARY**

Dr. Glenn Markle  
NARST  
University of Cincinnati  
Cincinnati, OH 45221-0002  
(513) 475-2335

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Organized to improve science teaching—through research

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# NARST

NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

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**PRESIDENT**

Dr. Linda DeTure  
Education and Human Development  
Rollins College  
Winter Park, FL 32789

---

---

**PRESIDENT-ELECT**

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

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---

**IMMEDIATE PAST PRESIDENT**

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

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**BOARD MEMBERS-AT-LARGE**

Dr. Charles Anderson (1990)  
College of Education  
Michigan State University  
East Lansing, MI 48824

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

Dr. Fred Finley (1990)  
Curriculum and Instruction  
University of Minnesota  
Minneapolis, MN 55455

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

Dr. Mary Budd Rowe  
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)  
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Kansas State University  
Manhattan, KS 66506

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---

**JOURNAL EDITOR**

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

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---

**RESEARCH COORDINATOR**

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

---

---

**NARST-NEWS EDITOR**

Dr. Thaddeus W. Fowler (1989)  
University of Cincinnati  
Cincinnati, OH 45221-0002

Send To Fred Finkley

NOMINATING PAPERS FOR THE NARST AWARDS

This year the NARST Awards committee is working to increase the participation of the NARST membership in the Awards Program. There are two awards. The

NARST OUTSTANDING RESEARCH PAPER AWARD

and the

NARST PRACTICAL APPLICATIONS RESEARCH AWARD

We need your assistance in this effort in one of two ways.

- I. SUBMIT YOUR OWN PAPER as soon as the call for the awards is announced in the newsletter, and
- II. NOMINATE AN PAPER THAT YOU JUDGE TO BE OUTSTANDING. When you hear a paper that you believe should be considered for either of the Awards complete the attached form and return it to the registration desk before the end of the meeting. The NARST Awards Committee chair will then write the authors and suggest that they submit their papers for their consideration along with those taht individuals submit on their own. Papers received by this procedure will then be entered in the normal review process.

-----  
NARST AWARD NOMINATION

Author: M. Gail Jones

Paper Title: Gender Differences in Stu Tea Int.

Session Number: \_\_\_\_\_

Session Day and Time: Tue 2:30

Award (Circle one):

NARST OUTSTANDING RESEARCH PAPER AWARD

NARST PRACTICAL APPLICATIONS RESEARCH AWARD

NARST SPRING BOARD MEETING

APRIL 12, 1988

AGENDA

1. Minutes of April 10 Board Meeting
2. Committee Reports
  - Financial Advisory Committee
  - Publications Advisory Committee
  - Program Committee
  - Policy Advisory Committee
  - Research Committee
  - Elections Committee
  - Ad hoc Committees
3. Executive Secretary's Report
4. Old Business
5. New Business

F. Representatives to:

|    |                    |              |    |
|----|--------------------|--------------|----|
| a. | AAAS               | Dave Lockard | 55 |
| b. | ICASE              | Dave Butts   | 56 |
| c. | ISE Advisory Board | John Koran   | 67 |
| d. | Triangle Coalition | Robert Howe  | 68 |

|    |                    |  |    |
|----|--------------------|--|----|
| IV | Other Old Business |  | 69 |
|----|--------------------|--|----|

|   |              |  |  |
|---|--------------|--|--|
| V | New Business |  |  |
|---|--------------|--|--|

|    |         |  |  |
|----|---------|--|--|
| VI | Adjourn |  |  |
|----|---------|--|--|

National Association for Research in  
Science Teaching

Spring Meeting, Executive Board  
Lake Ozark, Missouri

April 10, 1988

Proposed Agenda

|     |   |                  |    |
|-----|---|------------------|----|
| I   | Welcome -                                       | Linda DeTure     |    |
| II  | Approval of Minutes for November 5, 1987        |                  | 3  |
| III | Reports   |                  |    |
|     | A. Presidents                                   |                  |    |
|     | 1. President-Elect                              | Pat Blosser      | 16 |
|     | 2. President                                    | Linda DeTure     | 17 |
|     | 3. Past-President                               | Jim Barufaldi    | 19 |
|     | B. Executive Secretary                          | Glen Markle      | 20 |
|     | C. Committee Reports                            |                  |    |
|     | 1. Financial Advisory Committee,                | John Staver      | 29 |
|     | 2. Publications Advisory Committee,             | Ron Good         | 30 |
|     | 3. Policy Advisory Committee,                   | Jim Barufaldi    | 32 |
|     | 4. Program Committee,                           | Patricia Blosser | 33 |
|     | 5. Research Committee,                          | Rodger Bybee     | 34 |
|     | 6. Elections Committee,                         | Jim Barufaldi    | 37 |
|     | 7. Awards Committees                            |                  |    |
|     | a. Steering Committee                           | Michael Padilla  | 38 |
|     | b. JRST Awards                                  | John Staver      | 40 |
|     | c. NARST Awards                                 | Fred Finley      | 41 |
|     | 8. Ad Hoc Committee for<br>International Issues | Pam Fraser       | 42 |
|     | D. Editor of Journal,                           | Russell Yeany    | 47 |
|     | E. NARST Archivist,                             | Paul Joslin      | 48 |

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Dr. Glenn Markle  
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Organized to improve science teaching—through research



NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

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**PRESIDENT**

Dr. Linda DeTure  
Education and Human Development  
Rollins College  
Winter Park, FL 32789

April 10, 1988

---

**PRESIDENT-ELECT**

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

**TO: NARST Board Members and Officers**

**FROM: John R. Staver, Chairperson  
JRST Award Committee**

---

**IMMEDIATE PAST PRESIDENT**

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

**RE: Committee Action, 1987-88**

---

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Colorado Springs, CO 80903

---

**NARST-NEWS EDITOR**

Dr. Thaddeus W. Fowler (1989)  
University of Cincinnati  
Cincinnati, OH 45221-0002

The JRST Award Committee has completed another busy and productive year in which it revised the award process (see report in minutes of fall, 1987 board meeting) and evaluated articles in volume 24 of the Journal. The committee was composed of eighteen (18) members, including myself. This number was needed to continue the high quality of the selection process through a reasonable reading load for each number.

The selection process was carried out in two phases. First, the best article within each issue was selected. First round reading assignments for all committee members are attached. Most members read two issues; some members read only one issue; one person did not participate in the first round due to problems in relocating to the U.S.A. from Australia. Frances Lawrenz was excused from rating issue 8, as she had an article in that issue. Kevin Wise was assigned issue 8. Second, members read and rated all first round winners. Two members (Gallagher and Tobin) were excused from the second round because their paper was a first round winner.

In both phases, members' ratings were evaluated by me in two ways to make a selection:

- 1) Highest total point obtained
- 2) Lowest total ranking points relative to other articles

In phase one, this system resulted in the selection of a single article from each issue for consideration in phase two. In phase two, the system resulted in three articles which were ranked substantially higher than the remaining six papers. However, the rankings of the top three papers were essentially equal, making it impossible to distinguish among them. Moreover, each article represents a different approach to scholarship. Thus, I declared a three-way tie for the JRST Award.

The titles and authors of the winning articles are given below:

The Role of Target Students in the Science Classroom

by

Kenneth Tobin and James J. Gallagher

Some Benefits of Creating Macro-Contexts for Science  
Instruction: Initial Findings

by

Robert D. Sherwood, Charles K. Kinzer, John D. Bransford, and  
Jeffery J. Franks

The Four-Card Problem Resolved? Formal Operational Reasoning  
and Reasoning to a Contradiction

by

Anton E. Lawson

CALENDAR OF ACTIVITIES FOR  
JRST AWARD COMMITTEE  
JOHN R. STAVER

| <u>Month</u>     | <u>Task</u>   |
|------------------|---|
| April/May/June   | Complete perodic check-up and revision of JRST Award procedures   |
| July             | <p>Prepare first mailing to include:</p> <ol style="list-style-type: none"> <li>1. Letter explaining JRST Award procedures and specifying deadlines.</li> <li>2. Rating form</li> <li>3. Sheet explaining rating form</li> <li>4. Assignments of raters to specific issues of JRST</li> </ol> <p>Each issue of JRST should be assigned to three committee members.</p>  |
| November         | Reminder letter to each rater specifying deadlines.   |
| January/February | <p>Collect and tabulate results of first round ratings. Decide which <u>one</u> article from each issue is to go to the second round.</p> <p>Mail out second round materials which include:</p> <ol style="list-style-type: none"> <li>1. Letter explaining second round.</li> <li>2. Rating Form</li> <li>3. Sheet explaining rating form.</li> </ol> <p>Each rater should rate each of the issues-winning articles.</p> |
| February/March   | <p>Tabulate ratings.</p> <p>Decide which article(s) is to receive award.</p> <p>Call NARST president.</p> <p>Call award winner(s).</p> <p>Call Paul Joslin to get plaque engraved.</p>  |

JRST AWARD COMMITTEE MEMBERS 1987-88

CHAIR PERSON: Dr. John R. Staver  
University of Illinois at Chicago  
College of Education  
Box 4348  
Chicago, IL 60680

MEMBERS

Dr. Charles R. Ault, Jr.  
Graduate School of Professional Studies  
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Cincinnati, OH 45221

Dr. Kenneth G. Tobin  
Science Education  
Florida State University  
Tallahassee FL 32306

Dr. Kevin C. Wise  
Curriculum and Instruction  
Southern Illinois University  
Carbondale, IL 62901

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

Scan all articles in the issue you are judging before you begin the reading and rating process. Then rate all articles in the issue in the shortest time span possible by using the following criteria. After all articles are rated, review the ratings across articles to insure objectivity and reliability.

- |  |  |
|--|--|
| 1. Significance of Problem or Issue (10 pts.)              | How important or critical is the problem or issue being addressed by the author(s)? Timeliness, relevance and scope are all aspects of this concept.   |
| 2. Background (10 pts.)                                    | How adequate is the presentation of related theory and relevant literature?  |
| 3. Approach (10 pts.)                                      | How adequate and sound is the approach to the problem or issue? In a research article this includes design and data analysis; In a position paper this includes the logic and nature of the argument used. |
| 4. Significance of Conclusions or Positions (10 pts.)      | Are they based on the evidence and logical argument and then presented in such a way as to address relevant concerns in science education?   |
| 5. Potential Impact of the Outcomes or Positions (10 pts.) | What is the potential to influence thinking and practices in science education? Do the outcomes or positions have potential impact?  |
| 6. Uniqueness (10 pts.)                                    | How new are the approach and/or ideas presented in the article?  |
| 7. Communication (10 pts.)                                 | How well written is the article?   |
| 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 \_\_\_\_\_, Number \_\_\_\_\_, Page #s \_\_\_\_\_

Title \_\_\_\_\_  
\_\_\_\_\_

REVIEWER \_\_\_\_\_

RATING SCALE

POOR      BELOW AVERAGE      ADEQUATE      GOOD      EXCELLENT  
1    2    3    4    5    6    7    8    9    10

| Reviewer's Rating | Criterion                                 | Comments |
|-------------------|---|----------|
| 1. _____          | Significance of Problem or Issue          |          |
| 2. _____          | Background                                |          |
| 3. _____          | Approach                                  |          |
| 4. _____          | Significance of Conclusions or Positions  |          |
| 5. _____          | Potential Impact of Outcomes or Positions |          |
| 6. _____          | Uniqueness                                |          |
| 7. _____          | Communication                             |          |
| 8. _____          | Overall                                   |          |

TOTAL \_\_\_\_\_

Return to:  
Dr. John R. Staver  
University of Illinois at Chicago  
College of Education  
Box 4348  
Chicago, IL 60680

JRST Award Reading Assignments - Round 1, 1987

| <u>Member</u>   | <u>Issue</u> |   |
|-----------------|--------------|---|
| Charles Ault    | 1            | 7 |
| Charles Barman  | 2            | 8 |
| Ron Bonnstetter | 3            | 9 |
| Julia Clark     | 4            |   |
| Don Daus        | 5            | 1 |
| Richard Duschl  |              | 2 |
| James Gallagher | 6            | 3 |
| Mary Lou Koran  | 7            | 4 |
| Frances Lawrenz | <del>8</del> | 5 |
| Edmund Marek    | 9            | 6 |
| Earl Montague   | 1            | 7 |
| Pat Obenauf     | 2            | 8 |
| Joseph Riley    | 3            | 9 |
| Julie Sanford   | 4            |   |
| Piyush Swami    | 5            |   |
| Kenneth Tobin   |              |   |
| Kevin Wise      | 6            | 8 |

TABLE 1

## MANUSCRIPT RECORD VOLUME 25 (1988)

*submitted to the Board by  
Rosale Young at the  
1988 Fall Board Meeting*

| DESCRIPTION               | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 |
|---------------------------|------|------|------|------|------|------|
| Manuscripts Received      | 132  | 147  | 150  | 160  | 120  | 148  |
| Manuscript Pages Rec'd.   | 2675 | 2840 | 3021 | 3200 | 3000 | 3625 |
| Comments & Criticisms     | 11   | 4    | 6    | 4    | 6    | 5    |
| Book Reviews              | 0    | 2    | 0    | 0    | 0    | 0    |
| Manuscripts Accepted      | 81   | 56   | 59   | 60   | 55   | 70   |
| Manuscript Pages Accepted | 1915 | 1120 | 1169 | 1200 | 1375 | 1750 |
| Manuscripts Rejected      | 75   | 47   | 44   | 50   | 50   | 63   |
| Manuscripts Deactivated   | 8    | 0    | 0    | 0    | 0    | 0    |
| Manuscripts in Revision*  | 29   | 24   | 51   | 30   | 50   | 60   |
| Manuscripts in Review     | 9    | 11   | 56   | 20   | 30   | 40   |
| Acceptance Rate (%)       | 49   | 56   | 58   | 38   | 45   | 47   |
| Rejection Rate (%)        | 51   | 47   | 46   | 31   | 41   | 43   |

\* 30 Manuscripts are in for Major Revisions.

FIGURE 1

1988 JOURNAL EDITORIAL BOARD

|                   | 1st<br>Term | 2nd<br>Term |                  | 1st<br>Term | 2nd<br>Term |
|-------------------|-------------|-------------|------------------|-------------|-------------|
| Dale Baker        | 88          | 90          | William LaShier  | 89          | 91          |
| Donna Berlin      | 89          | 91          | Joy Lindbeck     | 89          | 91          |
| George Bodner     | 88          | 90          | Victor Mayer     |             | 89          |
| Ron Bonstetter    | 89          | 91          | Bruce Perry      | 89          | 91          |
| Ted Bredderman    | 89          | 91          | Peter Rubba      |             | 89          |
| William Capie     |             | 88          | Robert Shrigley  | 88          | 90          |
| Eugene Chiappetta | 88          | 90          | Mike Smith       | 89          | 91          |
| Linda Cronin      | 89          | 91          | Barbara Strawitz |             | 89          |
| Linda Crow        |             | 88          | Ken Tobin        |             | 88          |
| Willis Horak      |             | 88          | David Treagust   | 89          | 91          |
| Heidi Kass        | 88          | 90          | Michael Waugh    | 88          | 90          |
| Joseph Krajcik    | 89          | 91          | Emmett Wright    |             | 89          |
| Gerald Krockover  | 89          | 91          | Dana Zeidler     |             | 88          |

FIGURE 2

## 1989 JOURNAL EDITORIAL BOARD

|                   | 1st<br>Term | 2nd<br>Term |                  | 1st<br>Term | 2nd<br>Term |
|-------------------|-------------|-------------|------------------|-------------|-------------|
| Hannah Arzi       | 90          | 92          | William LaShier  | 89          | 91          |
| Dale Baker        |             | 90          | Joy Lindbeck     | 89          | 91          |
| Donna Berlin      | 89          | 91          | Victor Mayer     |             | 89          |
| George Bodner     |             | 90          | Steve Oliver     | 90          | 92          |
| Ron Bonstetter    | 89          | 91          | Bruce Perry      | 89          | 91          |
| Ted Bredderman    | 89          | 91          | Peter Rubba      |             | 89          |
| Eugene Chiappetta |             | 90          | Robert Shrigley  |             | 90          |
| Frank Crawley     | 90          | 92          | Patricia Simmons | 90          | 92          |
| Linda Cronin      | 89          | 91          | Mike Smith       | 89          | 91          |
| Jim Ellis         | 90          | 92          | Barbara Strawitz |             | 89          |
| Gaalen Erickson   | 90          | 92          | David Treagust   | 89          | 91          |
| Heidi Kass        |             | 90          | Michael Waugh    |             | 90          |
| Joseph Krajcik    | 89          | 91          | Emmett Wright    |             | 89          |
| Gerald Krockover  | 89          | 91          |                  |             |             |

FIGURE 3

NAMES AND ADDRESSES OF NEW MEMBERS  
JOURNAL EDITORIAL BOARD  
BEGINNING 1989

Hannah Arzi  
(current)  
Center for Science Education  
P. O. Box 22685  
Tel Aviv 61226  
Israel

(1989)  
University of Arizona  
School of Education  
Tucson, AZ 85721

Frank Crawley  
Science Education Center  
University of Texas at Austin  
Austin, TX 78712

Jim Ellis  
BSCS  
1115 N. Cascade Avenue  
Colorado Springs, CO 80903

Galen Erickson  
Faculty of Education  
University of British Columbia  
Vancouver, BC V6T 1Z5  
Canada

Steve Oliver  
Curriculum and Instruction  
249 Bluemont Hall  
Kansas State University  
Manhattan, KS 66506

Patricia Simmons  
Science Education Department  
University of Georgia  
212 Aderhold  
Athens, GA 30602

# JOURNAL OF RESEARCH IN SCIENCE TEACHING

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47

RUSSELL H. YEANY, Jr., Editor

*Department of Science Education*

*The University of Georgia*

*Athens, Georgia 30602*

*Telephone No. (404) 542-1763*

TO: Linda DeTure and  
Executive Board, National Association  
for Research in Science Teaching

FROM: Russell H. Yeany, Editor  
Journal of Research in Science Teaching

RE: 1988 Editor's Report

DATE: April 8, 1988

The attached report is a compilation of materials and data from the University of Georgia office and the Wiley office in New York. Chris Sheppard from Wiley was very helpful in collecting the information. She had planned to attend the Board meeting but had to cancel. She sends her regrets.

Our relations with Wiley are very good. I am glad to hear that we have negotiated a new contract for publication with them. I don't know the details but expect that Glenn will report to the Board on this matter.

/lr

TABLE 1

## MANUSCRIPT RECORD VOLUME 24 (1987)

| DESCRIPTION               | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 |
|---------------------------|------|------|------|------|------|------|
| Manuscripts Received      | 142  | 132  | 147  | 150  | 160  | 120  |
| Manuscript Pages Rec'd.   | 2410 | 2675 | 2840 | 3021 | 3200 | 3000 |
| Comments & Criticisms     | 14   | 11   | 4    | 6    | 4    | 6    |
| Book Reviews              | 5    | 0    | 2    | 0    | 0    | 0    |
| Manuscripts Accepted      | 69   | 81   | 56   | 59   | 60   | 55   |
| Manuscript Pages Accepted | 1716 | 1915 | 1120 | 1169 | 1200 | 1375 |
| Manuscripts Rejected      | 64   | 75   | 47   | 44   | 50   | 50   |
| Manuscripts Deactivated   | 4    | 8    | 0    | 0    | 0    | 0    |
| Manuscripts in Revision * | 36   | 29   | 24   | 51   | 30   | 50   |
| Manuscripts in Review     | 7    | 9    | 11   | 56   | 20   | 30   |
| Acceptance Rate (%)       | 50   | 49   | 56   | 58   | 38   | 45   |
| Rejection Rate (%)        | 50   | 51   | 47   | 46   | 31   | 41   |

\* 26 Manuscripts are in for Major Revisions.

## FIGURE 1

## 1987 JOURNAL EDITORIAL BOARD

|                      | 1st<br>Term | 2nd<br>Term |                  | 1st<br>Term | 2nd<br>Term |
|----------------------|-------------|-------------|------------------|-------------|-------------|
| Dale Baker           | 88          | 90          | Douglas Roberts  |             | 87          |
| Marianne Betkouski   |             | 87          | Peter Rubba      | 87          | 89          |
| George Bodner        | 88          | 90          | Robert Sherwood  |             | 87          |
| Eugene Chiappetta    | 88          | 90          | Robert Shrigley  | 88          | 90          |
| William Capie        | 86          | 88          | Doris Simonis    |             | 87          |
| Linda Crow           | 86          | 88          | Barbara Spector  | 87          | 89          |
| George DeBoer        |             | 87          | Barbara Strawitz | 87          | 89          |
| Richard Duschl       |             | 87          | Pinchas Tamir    |             | 87          |
| Willis Horak         | 86          | 88          | Ken Tobin        | 86          | 88          |
| Heidi Kass           | 88          | 90          | Ed van den Berg  |             | 87          |
| Thomas Koballa       |             | 87          | Michael Waugh    | 88          | 90          |
| William C. Kyle, Jr. |             | 87          | Emmett Wright    | 87          | 89          |
| Victor Mayer         | 87          | 89          | Dana Zeidler     | 86          | 88          |
| Antonio Mendez       |             | 87          |                  |             |             |

## FIGURE 2

## 1988 JOURNAL EDITORIAL BOARD

|                   | 1st<br>Term | 2nd<br>Term |                  | 1st<br>Term | 2nd<br>Term |
|-------------------|-------------|-------------|------------------|-------------|-------------|
| Dale Baker        | 88          | 90          | William LaShier  | 89          | 91          |
| Donna Berlin      | 89          | 91          | Joy Lindbeck     | 89          | 91          |
| George Bodner     | 88          | 90          | Victor Mayer     |             | 89          |
| Ron Bonnstetter   | 89          | 91          | Bruce Perry      | 89          | 91          |
| Ted Bredderman    | 89          | 91          | Peter Rubba      |             | 89          |
| William Capie     |             | 88          | Robert Shrigley  | 88          | 90          |
| Eugene Chiappetta | 88          | 90          | Mike Smith       | 89          | 91          |
| Linda Cronin      | 89          | 91          | Barbara Strawitz |             | 89          |
| Linda Crow        |             | 88          | Ken Tobin        |             | 88          |
| Willis Horak      |             | 88          | David Treagust   | 89          | 91          |
| Heidi Kass        | 88          | 90          | Michael Waugh    | 88          | 90          |
| Joseph Krajcik    | 89          | 91          | Emmett Wright    |             | 89          |
| Gerald Krockover  | 89          | 91          | Dana Zeidler     |             | 88          |



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VIA FEDERAL EXPRESS

April 7, 1988

Dr. Russell H. Yeany, Jr.  
Room 212  
Aderhold Hall  
Dept. of Science Education  
The University of Georgia  
Athens, Georgia 30602

Dear Russ:

Enclosed are the reports we have prepared for the JRST Board Meeting. Feel free to call if you have any questions.

Please convey our regrets for not being able to attend.

Sincerely,

A handwritten signature in cursive script that reads 'Chris'.

Chris Shepherd

cc: T. King  
J. Rosenthal

Enclosures

Monday, 4 April 1988

\*  
PUBLAG REPORT FOR THE JOURNAL OF RESEARCH IN SCIENCE TEACHING  
January 1987 - Present

\* Time from receipt at Wiley to publication

Volume 24

|              |            |
|--------------|------------|
| (1) - 6 mos. | (01/01/87) |
| (2) - 5 mos. | (02/01/87) |
| (3) - 6 mos. | (03/01/87) |
| (4) - 5 mos. | (04/01/87) |
| (5) - 6 mos. | (05/01/87) |
| (6) - 9 mos. | (09/01/87) |
| (7) - 6 mos. | (10/01/87) |
| (8) - 6 mos. | (11/01/87) |
| (9) - 6 mos. | (12/01/87) |

Year Average: 6 mos.

Volume 25

|              |            |
|--------------|------------|
| (1) - 6 mos. | (01/01/88) |
| (2) - 5 mos. | (02/01/88) |
| (3) - 5 mos. | (03/01/88) |

Monday, 4 April 1988

*OF MANUSCRIPTS*  
GEOGRAPHIC BREAKDOWN FOR THE  
JOURNAL OF RESEARCH IN SCIENCE TEACHING  
(January 1987 - present)

| <u>COUNTRY</u> | <u>COUNT</u> |
|----------------|--------------|
| Australia      | 5            |
| Canada         | 3            |
| England        | 1            |
| France         | 1            |
| Ghana          | 2            |
| Israel         | 4            |
| Jordan         | 2            |
| Nigeria        | 2            |
| New Zealand    | 1            |
| South Africa   | 1            |
| South Korea    | 1            |
| Taiwan         | 1            |
| USA            | 58           |
| West Germany   | 1            |
| Zambia         | 1            |
| Total:         | 84           |

JRST Status as of March 28, 1988

Jan. 1988 (Vol. 25, No. 1), published, with 96 printed pages  
Feb. 1988 (Vol. 25, No. 2), published, with 80 printed pages  
March 1988 (Vol. 25, No. 3), published, with 88 printed pages  
April 1988 (Vol. 25, No. 4), published, with 72 printed pages  
May 1988 (Vol. 25, No. 5, scheduled to publish April 15, with 96 printed pages

In house

249--36 pp., 4 tables, 2 figs.  
250--24 pp., 3 tables, 1 fig.  
251--29 pp., 7 tables, 2 figs.  
252--21 pp., 5 tables, 1 fig.  
253--14 pp., 1 table, 1 fig.  
254--27 pp., 6 tables, 2 figs.  
255--18 pp., 5 tables, 1 fig.  
256--17 pp., 12 tables  
257--14 pp., 1 table  
258--21 pp.  

---

Total = 221 pp., 44 ill.  
(approx. 133 proof pp.)

To author

244--14 pp.

From author

231--29 pp.  
232--14 pp.  
233--14 pp.  
234--8 pp.  
235--23 pp.  
236--17 pp.  
237--16 pp.  
238--25 pp.  
239--15 pp.  
240--16 pp.  
241--11 pp.  
243--10 pp.  
245--20 pp.  
246--9 pp.  
247--9 pp.  
248--11 pp.

I.

JOURNAL OF RESEARCH IN SCIENCE TEACHING

TWO YEAR CIRCULATION COMPARISON

| <u>February Comparison</u>     | <u>Domestic</u> | <u>Foreign</u> | <u>Total</u> | <u>Variance</u> | <u>Member*</u> |
|--------------------------------|-----------------|----------------|--------------|-----------------|----------------|
| February 1988                  | 1138            | 430            | 1568         | +11.4%          | 556            |
| February 1987                  | 1014            | 394            | 1408         |                 | 373            |
| <br><u>December Comparison</u> |                 |                |              |                 |                |
| December 1987                  | 1409            | 530            | 1939         | +4.3%           | 720            |
| December 1986                  | 1243            | 616            | 1859         |                 | 605            |

\*Included in total.

4/1/88

II. JOURNAL OF RESEARCH IN SCIENCE TEACHING  
 INSTITUTIONAL vs. INDIVIDUAL REPORT  
 (Paid subscriptions as of 12/31/87)

| <u>Classification</u>     | <u># of Subscriptions</u> | <u>% of Total</u> |
|---------------------------|---------------------------|-------------------|
| <u>Institutional</u>      |                           |                   |
| Institute                 | 877                       | 45.8%             |
| Institute Library         | 107                       | 5.6%              |
| Industry                  | 128                       | 6.7%              |
|                           | <hr/>                     | <hr/>             |
| Sub-Total                 | 1112                      | 58.1%             |
| <br><u>Individual</u>     |                           |                   |
| Individual (at home)      | 708                       | 36.9%             |
| Individual (at institute) | 25                        | 1.3%              |
| Individual (at industry)  | 70                        | 3.7%              |
|                           | <hr/>                     | <hr/>             |
| Sub-Total                 | 803                       | 41.9%             |
| TOTAL                     | 1915                      | 100.0%            |

4/1/88

## INTERNATIONAL REPORT

(1987 paid subscriptions through 12/31/87)

| <u>Country</u> | <u># of Subs</u> | <u>Country</u> | <u># of Subs</u> |
|----------------|------------------|----------------|------------------|
| Argentina      | 1                | Japan          | 50               |
| Australia      | 55               | Korea          | 6                |
| Austria        | 1                | Malaysia       | 4                |
| Bahareim       | 1                | Mexico         | 3                |
| Barbados       | 1                | Netherlands    | 3                |
| Belgium        | 6                | New Zealand    | 5                |
| Brazil         | 6                | Nigeria        | 3                |
| Canada         | 54               | Norway         | 2                |
| China          | 7                | Phillipines    | 5                |
| Colombia       | 1                | Portugal       | 4                |
| Costa Rica     | 1                | Saudi Arabia   | 3                |
| Denmark        | 3                | Scotland       | 5                |
| Egypt          | 1                | Singapore      | 4                |
| England        | 55               | South Africa   | 21               |
| Ethopia        | 1                | Spain          | 20               |
| Finland        | 7                | Sweden         | 3                |
| France         | 4                | Switzerland    | 3                |
| West Germany   | 25               | Taiwan         | 6                |
| Holland        | 9                | Thailand       | 7                |
| Hong Kong      | 2                | Trinidad       | 2                |
| Iceland        | 1                | Turkey         | 3                |
| India          | 14               | Venezuela      | 2                |
| Ireland        | 3                | Wales          | 2                |
| Israel         | 9                | Yugoslavia     | 37               |
| Italy          | 12               | Other          | <u>34</u>        |
|                |                  | TOTAL          | 530              |

4/1/88

| Campaign Effort | Mail Date | Description | Quantity Mailed | # Direct Orders (Gross) | % Response | # Net Paid Orders | % Response | Net \$ Sales | Net Cost To Mail | Cost Per Order (Net) |
|-----------------|-----------|-------------|-----------------|-------------------------|------------|-------------------|------------|--------------|------------------|----------------------|
|-----------------|-----------|-------------|-----------------|-------------------------|------------|-------------------|------------|--------------|------------------|----------------------|

ADVERTISING

|                          |       |   |  |  |  |  |  |  |       |      |
|--------------------------|-------|---|--|--|--|--|--|--|-------|------|
| 7-0246                   | 6/86  | EDUCATION LIBRARY AD UPDATE                         |  |  |  |  |  |  | \$73  |      |
| 7-0257                   | 8/86  | EDUCATION LIBRARY AD (created for Shirley Hochberg) |  |  |  |  |  |  | \$207 |      |
| 7-0264                   | 10/86 | CURRICULUM INQUIRY circ. 1,300                      |  |  |  |  |  |  |       | \$28 |
|                          | 10/86 | SCIENCE EDUCATION circ. 2,000                       |  |  |  |  |  |  |       |      |
| TOTAL ADVERTISEMENTS (4) |       |   |  |  |  |  |  |  | \$308 |      |

EXHIBITS

|       |   |
|-------|---|
| 10/86 | FRANKFURT BOOK FAIR                       |
| 1/87  | AMERICAN ASSOCIATION OF PHYSICS TEACHERS  |
| 2/87  | TEXAS JUNIOR COLLEGE TEACHERS ASSOCIATION |
| 3/87  | NATIONAL SCIENCE TEACHERS ASSOCIATION     |

TOTAL EXHIBITS (4)

TIE INS

|       |                       |        |
|-------|-----------------------|--------|
| 11/86 | WILEY PREVIEW         | 10,000 |
| 12/86 | LIBRARIANS NEWSLETTER | 15,000 |

TOTAL TIE INS (2) 25,000

TOTAL ALL SOURCES FY87 25,000 \$308

PAST PROMOTION DONE IN PREVIOUS YEARS 1 1 \$90

TOTAL ALL SOURCES 25,000 1 0.004 1 0.004 \$90 \$308 \$308

JOURNAL OF RESEARCH IN SCIENCE TEACHING

EDITORIAL MEETINGS, April 10, 1988

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Tie Ins

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Librarians Newsletter  
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## EDUCATION

NY = New York

C = Chichester

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### NY **Journal of Research in Science Teaching**

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