

National Association for Research in  
Science Teaching

Fall Meeting, Executive Board  
Pittsburgh, Pennsylvania

November 5, 1987

Propoosed Agenda

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1987 Spring Meeting of the Executive Board  
National Association for Research in Science Teaching  
Washington, DC  
April 23, 1987

MINUTES

Board Members in Attendance

- |                      |                     |
|----------------------|---------------------|
| Dr. James Barufaldi  | Dr. Glenn Markle    |
| Dr. Patricia Blosser | Dr. Michael Padilla |
| Dr. Jane Bowyer      | Dr. Mary Budd Rowe  |
| Dr. David Butts      | Dr. John Staver     |
| Dr. Rodger Bybee     | Dr. Emmett Wright   |
| Dr. Linda DeTure     | Dr. Russell Yeany   |
| Dr. Ronald Good      |                     |

Others in attendance: Dr. Charles Anderson, Dr. Fred Finley

- A. Opening remarks by President Barufaldi.
- B. Approval of Minutes Describing the 1986 Fall Meeting

Motion: Moved that the minutes of the October 30, 1986 meeting of the Board be approved. (Butts, Blosser)

Motion carried.

- C. Financial Advisory Committee Report

The Financial Committee Report was presented by John Staver. The FAC examined a "life membership category" for NARST and recommended no Board action until additional information is received from NSTA. The ensuing discussion led to the consensus that NARST should not offer a life membership option at this time.

The annual audit of the NARST account by the University of Cincinnati fiscal office is due by June 1, 1987.

Motion: Moved the report by the Financial Advisory Committee be accepted. (Padilla, Bowyer).

Motion carried.

D. Policy Advisory Committee

The Policy Advisory Committee report was presented by David Butts. The Committee was unable to reach agreement on a recommended procedure for selecting hotel sites for future conferences. Three options were presented for consideration by the Board:

1. Take no action at this time and refer the matter to the new PAC for recommendation.
2. Take no action at this time and refer the matter to the president and executive secretary for their recommendation.
3. Generate a policy at this meeting of the Executive Board.

A consensus emerged that meetings should be planned well in advance with sites selected four or five years in advance.

Linda DeTure suggested a meeting of the president, president-elect, executive secretary, and Policy Advisory Committee to propose a five year plan and a policy to guide convention site selection.

Rodger Bybee suggested consideration of the following factors when selecting convention sites: finances, the potential value of meeting with another research-oriented organization like AERA, and geographical location.

Russell Yeany recommended that NARST not follow a set plan of alternating meetings with AERA and NSTA, but to plan meetings according to conditions at the time the plans are being made. Mike Padilla suggested that the AERA-NSTA pattern is a good one and should be followed in the immediate future. John Staver took the position that for 1989, the choice between San Francisco (AERA) and Seattle (NSTA) both meant a trip to the west coast and that one was as good as the other.

Jane Bowyer suggested a potential meeting site at a state park outside San Francisco. Reservation would need to be made as soon as possible.

The discussion shifted to the need for a policy regarding site selection.

Motion: Moved that the Policy Advisory Committee propose a policy to guide the selection of future meeting sites. (Butts, DeTure).

The term "site" refers to the city in which NARST will meet.

Motion carried.

Motion: Moved that President-elect DeTure come to the Saturday Board meeting with recommendations for meeting sites for the next four or five years. (Butts, Padilla)

Motion carried.

*A* A consensus emerged that the Executive Secretary and President Elect must communicate regularly concerning specific meeting sites. The role/responsibilities of the Executive Secretary, President, President-elect and Board must be clarified (*Fall Board Meeting*)

E. Program Committee Report

The Program Committee report was presented by Linda DeTure. President Barufaldi commended Dr. DeTure for her excellent work in preparing this year's program.

Motion. Moved that the program Committee Report be accepted. (Staver, Butts)

Motion passed.

F. Research Committee

Rodger Bybee reported on the activities of the Research Committee. The review of candidates for editor of a research column in the Journal of College Science Teaching was a major effort the Committee.

Motion. Moved that Linda Crow be named editor of the proposed research column in the Journal of College Science Teaching for a three year from September, 1987 to September, 1990. (Bybee, Staver)

Motion carried.

Motion. Moved that the Research Committee report be accepted. (Butts, Blosser)

Motion carried.

G. Elections Committee

The Elections Committee report was presented by David Butts. Ballots were mailed to 611 members and 303 were returned in time to be counted. Patricia Blosser was elected to serve as President-elect; Fred Finley and Charles Anderson were elected to positions on the Executive Board. The proposed dues increase was approved by a majority of the members voting (199/301).

Motion. Moved that the Elections Committee report be accepted. (Wright, Bybee)

Motion carried.

H. Awards Committee

- a. Mike Padilla reported on the activities of the Policy Committee of the Awards Committee. The Policy subcommittee deals with the NARST Distinguished Contribution Award in addition to policy matters related to all awards. The revised procedures for selecting recipients of the Distinguished Contributions Award were described and Paul D. Hurd was identified as the 1987 recipient. Mike suggested that the credentials of selected candidates should be kept on file and automatically considered the next year.

Dr. Bybee commended Mike on the process/procedures developed to select recipients. He concurred with Dr. Padilla that some nominations should be carried over from one year to the next.

Motion. Moved that the Awards Committee propose a policy for continuation in the nomination process from one year to the next. (Butts, Wright)

Motion carried.

The nominees for 1987 were Dudley Herron, Paul Hurd, George Mallison, Pinchas Tamir, and John Renner. Mike suggested that while the nominees represented an outstanding group of science education researchers, more nominees would strengthen the process and urged that Board members consider ways of increasing the number of nominations.

Mary Budd Rowe emphasized the need to keep information about the nominations and committee discussions and decisions confidential.

- b. JRST Award. John Staver reported on the activities of the JRST Award subcommittee and announced the recipients of the 1987 award: Russell Yeany, Kueh Chin Yap, and Michael Padilla for the article, "Analyzing Hierarchical Relationships Among Modes of Cognitive Reasoning and Integrated Science Process Skills."

President Barufaldi commended the procedure used to select the recipient. Mike Padilla suggested adding a qualitative component and suggested that the Awards Committee discuss procedures for considering this component.

- c. Pat Blosser reported on the activities of the NARST Outstanding Paper Award subcommittee. Seventeen papers were submitted, more for the practical application award than for the outstanding paper award. The recipients for the award were identified.

Dr. Blosser reported that Fred Finley will head this subcommittee next year and that the process of transferring responsibility for the work of the committee has already begun.

Motion. Moved that the Awards Committee reports be accepted. (Butts, Bybee)

Motion passed.

I. Publication Advisory Committee.

The Publication Advisory Committee report was presented by Ron Good. The committee has not had an opportunity to meet but intends to meet this evening. A report will be forthcoming at the Saturday meeting of the Board.

J. Executive Secretary Report

The report of the Executive Secretary was presented by Glenn Markle.

Motion: Moved that the following members be granted emeritus membership in NARST:

Roy W. Allison  
Kenneth V. Olson  
Mary Ellen Quinn  
John Rosemergy

(Markle, Butts)

Motion passed.

Dave Butts suggested sending newly-named emeritus members some sort of certificate. No specific action was taken on this recommendation.

Motion: Moved that the Publication Advisory Commend recommend a procedure for clarifying copyright ownership and exclusive rights to JRST articles. (Markle, Blosser)

Motion passed.

Motion: Moved that the Publication Advisory Committee review the NARST contract with Wiley and the letter from Robert Dwyer, Attorney to determine if NARST should attempt to renegotiate the contract. (Markle, Bowyer)

The current contract expires December 31, 1987 and would be automatically renewed unless Wiley or NARST notifies the other to the contrary by June 30, 1987. A decision on pursuing this matter must be made before the end of the Spring conference.

Motion carried.

Other matters discussed included budget and expenditures for 1986; registrations at the current conference (currently about 300 with 248 advance registrations); plans for the 1988 conference at Lake of the Ozarks, MO; disposition of the "windfall" from the University of Calgary (\$8,000. in uncashed checks which may still represent encumbered monies. NARST will hold the money for the present time and see what happens between now and the fall meeting of the Board); and distribution of Membership Directories (the Board indicated a desire to provide each member with a copy of the Directory at the most reasonable cost possible. Stressed the value of "visible membership services").

Motion: Moved that the Executive Secretary Report be accepted. (Butts, Staver)

Motion carried.

K. Editor of the Journal

Russell Yeany presented the report of the JRST editor.

Motion: Moved that the journal editor's report be accepted. (Butts, Staver)

Motion carried.

L. Research Matters

The report on Research Matters was presented by Rodger Bybee. The procedures for selecting topics for research matters were discussed. Rodger suggested that Research Matters manuscripts could serve as an outlet for award winning application papers. Several board members pointed out that the application papers frequently focus on a very narrow area of research and may not be appropriate for Research Matters. However, the application-theme of "Research Matters to the Science Teacher" was reaffirmed as the desired focus for Research Matters.

The consensus of the Board was that the Research Committee is charged with recommending procedures for soliciting manuscripts, estimating costs, and making appropriate recommendations to the Board. Issues related to these matters should be addressed by the Committee.

Motion: Moved that the Research Matters report be accepted. (Good, Padilla)

Motion carried.

M. Pat Blosser reported on activities related to Investigations in Science Education.

N. The benefits of NARST's relationships with ICASE and the Triangle Coalition were discussed briefly. Jane Bowyer indicated she would contact John Fowler to clarify the Association's dues for the Triangle Coalition. Pat Blosser suggested checking with AETS to find out how much they pay to the Coalition.

O. The good work that Paul Joslin has done to develop a history of NARST was recognized by the Board.

1987 Spring Meeting of the Executive Board  
NARST  
Washington, D.C.  
Saturday, April 25, 1987

Minutes

Attendance: Board Members

- |                  |               |
|------------------|---------------|
| Charles Anderson | Glenn Markle  |
| James Barufaldi  | John Staver   |
| Jane Bowyer      | Emmett Wright |
| Patricia Blosser | Russell Yeany |
| Linda DeTure     | Fred Finley   |
| Ron Good         |               |

Others:

Ted Fowler

A. Minutes:

Distributed to be reviewed. Discussion on page 3. Clarified responsibility of Policy Committee regarding selections of future conference sites. During the fall meeting of the Board, the Executive Secretary will be responsible for presenting information on at least two potential meeting sites in or near the city in which the annual meeting will be held. The Board should decide on a meeting site at least two years prior to the meeting; that is, the 1989 meeting site will be selected at the 1987 fall meeting of the Board.

B. NARST News:

Fowler distributed notice of NARST News deadlines. Articles and other info for NARST News must be received at least one month prior to the publication date of the newsletter (March, June, September and December). Fowler presented a review of anticipated topics to be included in each issue of the Newsletter. He will send a summary to each board member.

Publishing the president's address in the NARST News and other outlets (JRST, ERIC) was discussed. There was general agreement that the NARST News is a good outlet for publishing the President's annual address.

C. Financial Advisory Committee:

Report by Staver. No information will be forthcoming for NSTA re: life membership. The FAC did not make a recommendation for life membership.

The FAC recommended that the annual meeting must pay for itself. A checklist will be developed to guide the budget process for annual meetings.

The need to bond the Board and officers was discussed. The cost of bonding will be investigated by the FAC.

The FAC has discussed the possibility of NARST purchasing a computer system that could "travel" with the Executive Secretary position to ensure ease of transfer of records when the executive secretary position changes.

Budget will be developed by executive secretary and FAC during the summer and will be presented at the Fall meeting of the Board.

D. Publication Committee

Ron Good presented the report of the Publication Committee. The notion of a fast-back series to communicate with members and practitioners had been discussed and the Committee was considering two fast-backs in the next year.

Pat Blosser said that NSTA is publishing something like this called COMPACTS.

Jim Barufaldi suggested greater attention to research matters rather than FASTBACKS.

Ron Good will look into what NSTA is doing and will come to the Fall Board meeting with a recommendation.

E. Policy Committee

No report.

F. Program Committee

Pat Blosser outlined the tentative plans for the 1988 annual meeting. A Board Meeting is planned for Sunday afternoon. Two training sessions will be presented Sunday afternoon. General session is Sunday evening - perhaps AAAS project 2061 report followed by a reception.

Concurrent sessions will begin Monday with a general session Monday afternoon.

Special interest groups to encourage networking among members are being considered for Monday evening.

Tuesday - concurrent sessions and awards luncheon. Business meeting in late afternoon and Board meeting Tuesday evening.

Wednesday - concurrent sessions ending before noon. Probably will need an early and later bus.

Ron Good suggested increasing the number of members who might suggest general session speakers by requesting recommendations in NARST News. Pat was concerned that speakers need to be identified as soon as possible and calling for recommendations for the membership would take additional time.

Emmett Wright supported the notion of soliciting additional input from the membership through the Newsletter.

Andy Anderson suggested including a questionnaire in NARST News to determine the special interest topics that could serve to exhibit member input for that part of the program.

#### G. Research Committee

Roger Bybee. The research committee with Bill Kyle has been in touch with NSTA. Using the "Every Teacher is Researcher" concept, teachers would be asked about topics which would be of most interest.

Four to six Research Matters seem appropriate.

Members of NARST presenting NSTA papers may be solicited as well as members doing work in areas of specific interest.

The research committee is considering various ways of packaging research matters.

#### H. Elections Committee

Jim Barufaldi wants nominations of candidates for president-elect.

Jane Bowyer suggested increasing the size of the nominating committee.

#### I. Awards Committee.

No report

#### J. ISE.

No report.

K. International Committee.

Report from Glen Aikenhead was read by Linda DeTure.  
Recommended mailing NARST News to selected international members.

Motion: Moved that NARST News be made to International Committee (Bybee, Barufaldi) International Committee up to what the budget allows.

Motion carried.

L. Triangle Coalition.

Invoice for \$100.00 will be coming from John Fowler. The implied directive to the Executive Secretary was to pay the bill when it comes.

M. AAAS Request for JRST.

Back issues are not being solicited of current volumes to be sent to about three institutions. Dave Lockard will be in touch with Markle with details. Markle will contact the appropriate people at Wiley to have the back issues distributed through AAAS.

Motion: Moved that NARST cooperate with AAAS to distribute back issues of JRST to outlets in underdeveloped countries.  
(Bybee, Bowyer)

Motion carried.

N. Future Meetings

The sites of future NARST annual meetings was discussed. Assuming we follow our tradition of alternating between meeting with NSTA and AREA, our meeting sites will be:

1988	St. Louis	April 7-10
1989	AERA St. Francisco	March 31-April 3
1990	NSTA Atlanta	
1991	AERA Chicago	April 7-10
1992	NSTA Boston	

Jane Bowyer suggested we look into the possibility of meeting at Asilomar outside San Francisco - in Pacific Grove, CA.

Motion: moved the annual NARST meeting for 1989 be held in San Francisco. (Bybee, Finley)

Motion carried.

O. Ad Hoc Committee.

Linda is exploring the possibility of forming an ad-hoc committee to encourage classroom teacher involvement in NARST.

P. NSTA Sessions.

NARST has 10 sessions at NSTA in St. Louis. Linda is seeking recommendations but must act before June 1, 1987.

Q. Exec Sec Report

No report.

R. Old Business

S. New Business

Fall Board Meeting will be November 5, 6 or 7 in Pittsburgh.  
Wm. Penn Hotel

T. Moved to Adjourn (Staver, Bybee).

Meeting Adjourned

**FINANCIAL ADVISORY COMMITTEE**

Chairman

John Staver (1989)  
School of Education  
University of Illinois at Chicago  
Chicago, Illinois 60680  
312-996-5630

Members

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

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

Emmett L. Wright (1989)  
Education  
Kansas State University  
Manhattan, Kansas 66506  
913-532-5550

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

Glenn Markle ex officio  
College of Education  
University of Cincinnati  
Cincinnati, Ohio 45221-0002  
513-475-2335

The Financial Advisory Committee is responsible for considering the annual budget prepared by the Executive Secretary, approve program expences, approve publication costs and new ventures, offer advice and recommendations to the Executive Board regarding all financial affairs of the Association, and conduct an annual audit of the financial accounts of the Association.

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

Report of the  
NARST Financial Advisory Committee Meeting  
to the NARST Board of Directors

November 5, 1987

The Financial Advisory Committee (FAC) met by long distance conference call on October 21, 1987 to carry out its charge to consider the proposed annual budget, approve program expenses, approve publication costs and new ventures, offer advice and recommendations to the Board regarding all financial affairs of the Association, and conduct an annual audit of the financial accounts of the Association. Discussion in five areas composes the body of this report: 1) A summary of the status of the 1987 budget through September 30; 2) the proposed 1988 budget; 3) life membership in NARST; 4) liability insurance for NARST and its officers and Board members; and 5) the annual audit of NARST financial accounts. The report ends with motions/recommendations of the FAC to the NARST Board.

1. Markle summarized the 1987 budget through September 30. Two issues emerged as central. First, Markle thinks that NARST may still owe Wiley about \$8,000, but he has asked Wiley to check and update the NARST status. Wiley says that we have no outstanding debt, that we are paid to date. The money involves approximately \$8,000 sent by former executive secretary Holliday to Wiley. Wiley returned the check. When the executive secretary's office moved to the University of Cincinnati, the money was transferred there. The saga continues. The second issue

centered upon the \$1700 deficit for the annual meeting. We must make the annual meeting operate at the break even point or possibly profit somewhat. Other items discussed were: 1) membership is up about 15%; 2) Markle is continuing his efforts to recruit new members. 3) Negotiations have begun with Wiley on the new JRST contract. The FAC commended Markle for a job well done.

2. Markle summarized the proposed 1988 budget. A lengthy discussion commenced with respect to several aspects of the budget. A) Markle has reduced expenditures associated with his office in accordance with past levels of expenditure. However, if circumstances change, expenditures could increase. B) The annual meeting is projected to operate at a loss. Should NARST increase the registration fee? C) The newsletter is an expensive item, but it provides an important service; we should maintain it at the present level. D) It seems that NARST pays a large sum to exhibit at NSTA. Can all or part of this cost be waived? E) NARST should not increase cost of attending the workshops because graduate students and recent Ph.D.s make up much of the audience.
3. Life membership in NARST was discussed briefly. Staver reported to the committee that it was not feasible. The committee unanimously recommended that no further consideration be given to a life membership category.
4. The question of liability insurance was discussed. A \$1,000,000 policy covering this organization as well as individual officers and board members, with a \$2,500 deductible, could cost as much as \$3,000 per year. Holliday suggested that each officer and board member check on such

coverage through a "professional rider" to his/her homeowners insurance. Moreover, as a protective measure, the committee directed Markle to contact an attorney in order to obtain recommendations about NARST obligations and possible disclaimer language to be printed in the program.

5. The committee discussed the financial report of Louis Fisher, fiscal officer at the University of Cincinnati. Mr. Fisher certifies that the expenditures summarized in his report were paid and that vouchers are available for audit purposes. The committee accepted the report and recommends unanimously that the NARST Board accept it.

#### Motions/Recommendations

- A. Increase advance registration fee from \$35 to \$50, and on-site registration fee from \$45 to \$60, effective with the 1988 meeting. Passed unanimously. *plus cost of banquet*
- B. Accept and recommend proposed budget with modifications above to the NARST board. Passed unanimously.
- C. Directed Markle to contact Bill Aldridge, NSTA executive secretary, to negotiate the cost of the NARST booth at the NSTA convention.
- D. Accepted the University of Cincinnati fiscal officer's report of the analysis of the NARST books and recommends that the NARST board accept it.

- E. Recommend that no further consideration be given to a NARST life membership category.
  
- F. Directed Markle to contact an attorney in order to obtain recommendations about NARST obligations and possible disclaimer language to be printed in the program.

**PUBLICATIONS ADVISORY COMMITTEE**

Chairman

Ronald G. Good (1989)  
Department of Curriculum & Instruction  
Louisiana State University  
Baton Rouge, Louisiana 70803  
504-388-2331

Members

James D. Ellis (1990)  
BSCS  
1115 N. Cascade Ave.  
The Colorado College  
Colorado Springs, CO 80903  
303-473-2233

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

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

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

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

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

**POLICY ADVISORY COMMITTEE**

Chairman

James P. Barufaldi (1988)  
Science Education Center EDB 340  
The University of Texas at Austin  
Austin, Texas 78712  
512-471-7354

Members

Linda R. DeTure (1988)  
Education/Human Development  
Box 2726  
Rollins College  
Winter Park, Florida 32789  
305-646-2242

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

James A. Shymansky (1989)  
450 Van Allen Bldg.  
University of Iowa  
Iowa City, Iowa 52242  
319-353-1167

Glenn Markle ex officio  
College of Education  
University of Cincinnati  
Cincinnati, Ohio 45221-0002  
513-475-2335

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

EXECUTIVE SECRETARY

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

Organized to improve science teaching—through research



NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

PRESIDENT

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

PRESIDENT-ELECT

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

TO: Linda De Ture

FROM; Jim Barufaldi, Chair *JB*  
Linda R. De Ture  
Burton Voss  
James Shymansky  
Glenn Markle, ex officio

IMMEDIATE PAST PRESIDENT

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

BOARD MEMBERS-AT-LARGE

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

RE: Policy Committee

Committee Charge

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

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

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

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

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

Recommendations: None at this time.

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

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

JOURNAL EDITOR

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

RESEARCH COORDINATOR

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

**PROGRAM COMMITTEE**

Chairman

Patricia E.. Blosser  
ERIC  
1200 Chambers Road  
The Ohio State University  
Columbus, Ohio 43212  
614-292-6717

Members

Dale R. Baker (1989)  
133 MBH  
University of Utah  
Salt Lake City, Utah 84112  
801-581-7158

J. Nathan Swift (1989)  
Education  
Poucher Hall  
SUNY, Oswego  
Oswego, New York 13126  
315-341-4024

Gerald L. Abegg (1989)  
261 Waltham St.  
Boston University  
Lexington, MA 02173  
617-353-4259

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

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

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

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

Glenn Markle ex officio  
College of Education  
University of Cincinnati  
Cincinnati, Ohio 45221-0002  
513-475-2335

The Program Committee is responsible for establishing the theme and format for the Annual Meeting, arranging for special speakers and symposia, and evaluating abstracts for contributed papers, and the evaluation of the Annual Meeting .

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

## EXECUTIVE SECRETARY

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

Organized to improve science teaching—through research

# NARST

NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

## PRESIDENT

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

## 1987-88 NARST PROGRAM COMMITTEE REPORT

Committee Members

Dale R. Baker  
133 MBH  
University of Utah  
Salt Lake City, Utah 84112

Linda Crow  
Houston Community College  
Houston, TX 77007

Gerald Abegg  
261 Waltham St.  
Boston University  
Lexington, MA 02173

Joel E. Bass  
Sam Houston State University  
Huntsville, TX 77340

## IMMEDIATE PAST PRESIDENT

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

J. Nathan Swift  
Education  
Poucher Hall  
SUNY, Oswego  
Oswego, NY 13136

Robert L. Shrigley  
168 Chambers Building  
The Pennsylvania State University  
University Park, PA 16802

## BOARD MEMBERS-AT-LARGE

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

Rodger W. Bybee, ex officio  
Biological Sciences Curriculum Study  
Colorado College  
Colorado Springs, CO 80903

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

Glenn Markle, ex officio  
College of Education  
University of Cincinnati  
Cincinnati, OH 45221

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

Patricia E. Blosser, chair  
Educational Studies: Science Education  
249 Arps Hall, OSU  
1945 N. High St.  
Columbus, OH 43210

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

The 1988 annual meeting of the National Association for Research in Science Teaching is scheduled for April 10-13 at the Lodge of the Four Seasons, Lake Ozark, MO. The program begins with training sessions on Sunday afternoon, April 10, and continues through the morning of April 13.

## JOURNAL EDITOR

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

The call for papers was announced in the June, 1987, issue of the NARST News and repeated in the fall issue. Deadline for paper submissions was October 1, 1987. As of October 15, 121 contributed papers, 8 paper sets, 11 symposia, 9 poster papers, and 2 research methods workshop proposals have been received. (I am told there is a postal strike in Canada and have received one telephone call from Sweden telling me that materials were on their way.)

## 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

Program Committee Report, p.2

All materials received have been categorized, recorded, and mailed to at least two committee members for review. The first review papers have been returned to OSU. The program committee (or those members able to travel to the NSTA meeting in Pittsburgh via funds other than from NARST) will meet the day after the board meeting to review any papers whose acceptance is not clear-cut, and to set the final program.

At present two general sessions and the Awards luncheon are planned, in addition to the concurrent sessions. Monday evening of the annual meeting, a series of networking groups will meet to begin to establish links between and among researchers with common interests but at different institutions. The time on Tuesday evening has not yet been committed to anything other than recreation or informal activities. However, there has been a request from one of the newer NARST members that we have a session in which we bring together some of the more experienced researchers and allow them to talk informally with graduate students. It is possible that we could use the presentation by Paul Joslin and his graduate student as the opening activity for this session and then set up opportunities for discussion with some of the more experienced researchers and graduate students and newer NARST members after this, and still allow time in the evening for informal activities.

One of the two major speakers has been confirmed. Based on the contacts Linda DeTure made last spring at the NARST meeting in Washington, a follow-up call was made to confirm that Jim Rutherford and/or Andrew Ahlgrin will present the first general session, Sunday evening, on research related to "Project 2061." The second general session's speaker has not been confirmed at the date of this report but several NARST members have suggested persons who might serve so there is a list of people who might be invited.

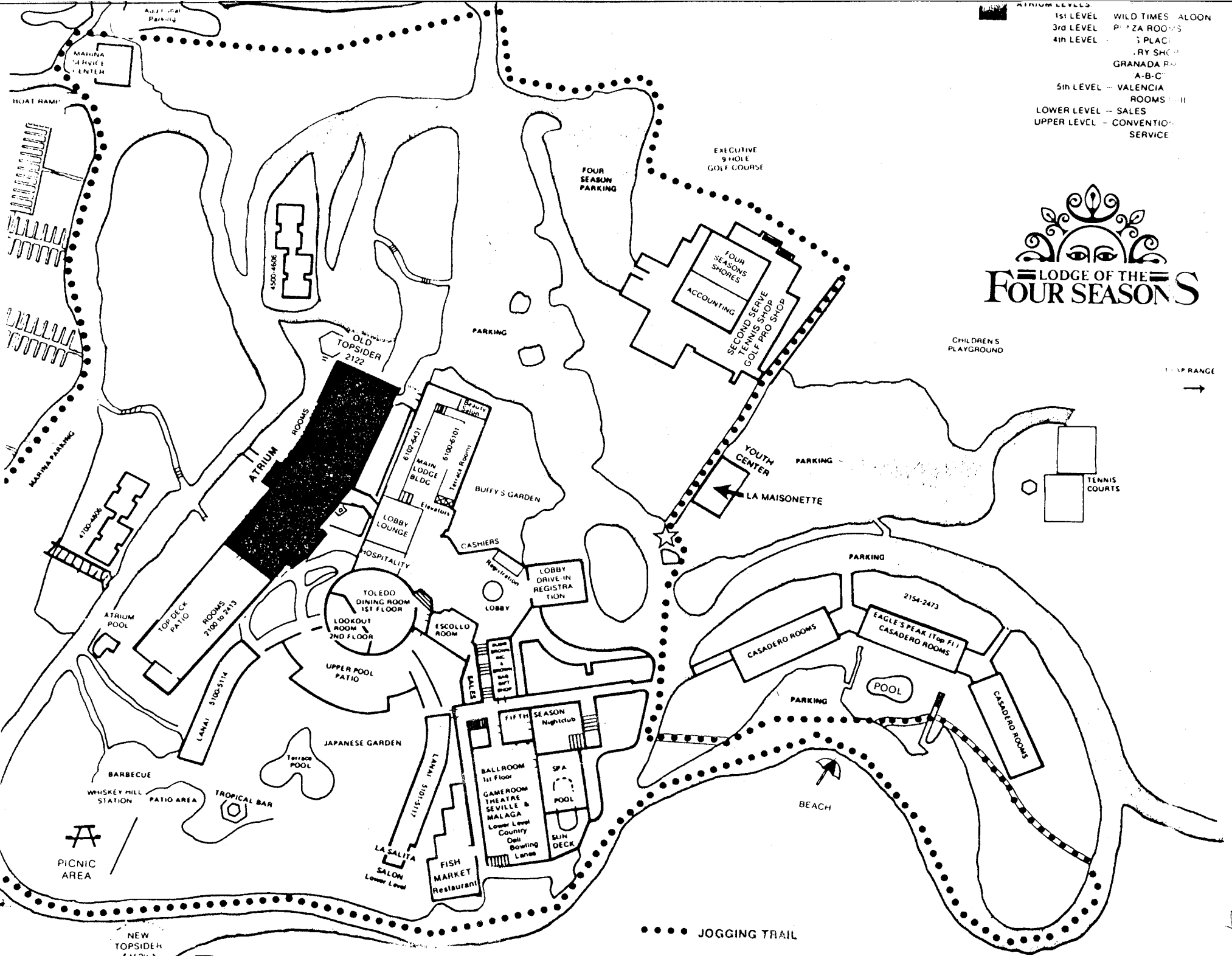
Glenn Markle and I visited the Lodge of the Four Seasons last May and met with the general manager to discuss details about rooms for sessions as well as sleeping rooms. Linda DeTure appointed a local arrangements committee for the 1988 meeting. These persons will help with registration, borrow AV materials from their colleges or universities, and - if need arises - provide transportation for a general session speaker to and from the airport he/she might use.

Program committee activities appear to be on schedule.

- 1st LEVEL - WILD TIMES SALOON  
 3rd LEVEL - PIZZA ROOMS  
 4th LEVEL - BAR PLACE  
 GRANADA ROOM  
 A-B-C  
 5th LEVEL - VALENCIA  
 ROOMS II  
 LOWER LEVEL - SALES  
 UPPER LEVEL - CONVENTION SERVICE



# LODGE OF THE FOUR SEASONS



For Information Call Hospitality Ext. 1500

25

## RESEARCH COMMITTEE

### Chairman

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

### Members

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

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

Dorothy Gabel (1989)  
NSF  
1800 G. Street N.W.  
Washington, D.C. 20550  
202-357-9478

William C. Kyle, Jr. (1989)  
67 Charles Lane  
Storrs, CT 06268  
University of Connecticut  
203-429-7774

Glenn Markle (ex Officio)  
College of Education  
University of Cincinnati  
Cincinnati, Ohio 45221-0002  
513-475-2335

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

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

**REPORT OF THE RESEARCH COMMITTEE**

**Fall 1987**

**SUBMITTED FOR THE COMMITTEE  
BY  
RODGER W. BYBEE  
RESEARCH COORDINATOR**

## INTRODUCTION

After the spring 1987 meeting of the Board of Directors, the Research Committee had three specific directives:

- Coordinate efforts with the "Every Teacher Is A Researcher" program of NSTA.
- Identify four to six authors for "Research Matters..."
- Consider various ways of packaging "Research Matters..."

At the board meeting incoming President Pat Blosser indicated that she would arrange training sessions for the convention. I was recently informed that I would be responsible for one training session. Those arrangements are included in this report.

In addition to the original directives, the President asked for a review of the role of the Research Coordinator and recommendations relative to ~~the position within NARST.~~

## Coordination with NSTA

During the NARST meeting, I met with William Kyle, Jr. (NSTA Research Division Director) and made arrangements for presentations at regional NSTA meetings. The presentations include:

- presentations by NARST members (Ron Bonstetter-Salt Lake City, Peter Rubba-Pittsburgh, and Tom Koballa-San Antonio)

- discussion of research by science teachers,
- distribution and discussion of "Research Matters...,"  
and
- completion of survey on "Research Interests of Classroom Teachers." This instrument includes an evaluation of "Research Matters..." (See Appendix A.)

The results of this informal survey should be available by spring 1988. NARST members should note that there is valuable information concerning the "Research Matters..." articles and suggestions for new topics.

#### "Research Matters..." 1988

The following are recommendations for authors and topics for "Research Matters..." 1988.

Reading in Science Classrooms	Sarah Ulerick Florida State University
Teaching for Transfer: Applying Science Concepts in Novel Situations	William Robertson Biological Sciences Curriculum Study
Conceptual Change Teaching Strategies for Science	James Shymansky University of Iowa
Recognizing Gender Difference in Science Teaching	Dale Baker University of Utah

#### Packaging "Research Matters..."

After some consideration about different ways of packaging "Research Matters...", the committee concluded the reasons for packaging the papers one way or the other were about balanced.

Given that it is not clear that one way has an advantage, we recommend that "Research Matters..." be packaged by volume and year. If at some time in the future, we decide that topics such as student learning, use of computers, or instructional strategies warrant individual packaging then that can be done.

### Training Session

Evaluation of School Science Programs

*Fran  
Lawrenz*  
Wayne Welch  
University of  
Minnesota  
(tentative)

### Responsibilities of the Research Coordinator

The office of Research Coordinator has potential for a variety of projects since it has the longest term of any elected office (3 years). However, this opportunity has not been fully realized in the past.

The position of Research Coordinator has not been clearly defined in the past. In general, a person was elected and the retiring coordinator talked with the new coordinator at the annual meeting. On one hand, there is the perception that the coordinator has quite a bit of freedom. On the other hand, the actual work leaves one with the impression that that freedom is somewhat restricted due to ambiguities of the office, directions of other offices, committees, and organizational policies. All of this is to say that there is a need for some clarification of the position, particularly for the next person elected to the office.

Duties of the current Research Coordinator include arranging for authors to write "Research Matters...", arranging training sessions for the national meeting, and completing other projects such as coordinating presentations with the NSTA Director of Research.

If a person knew he or she had various opportunities when they ran for the office, it may strengthen the specific office of Research Coordinator and NARST as an organization. I have listed some things that a Research Coordinator might do. These recommendations are for discussion only. Other recommendations may be made based on board discussion and suggestions.

The office of Research Coordinator could include any or all of the following responsibilities:

- Arrange for "Research Matters..." Specifically, an individual could set out a plan (and people) for three years of publications. This would allow for the development of topics and themes. If this were done with four out of the possible six issues a year, there would still be an opportunity for two new topics each year.
- Arrange one symposium for the NARST convention. The idea here is that the person knows he/she must do this, and that the topic is something that coordinates a line of research within NARST.

- Write a short column in the Newsletter. This opportunity currently exists. The recommendation is that this be a "requirement" of the office. The topic of the column could be "opportunities for research." With such a title, the column could include topics of needed research and it could describe funding priorities for agencies such as NSF, the Department of Education, and various private foundations.
- Design research projects for NARST. A three-year term provides opportunities for some research by NARST. There are topics of interest to the organization and its members as well as the wider science education community, for example, changes in course requirements for teacher certification, a catalogue of research priorities, changes in undergraduate and graduate science education, and trends in science education research.
- Liaison with other organizations. There is some need for involvement, as appropriate, with research in other organizations such as AERA, NSTA, AAAS, and SSMA.

These are but a few of the opportunities of the office. They are offered for discussion and clarification before the next Research Coordinator assumes office.

NARST Column in Journal of College Science Teaching

Linda Crow has completed the first research column for the Journal of College Science Teaching. Columns have been scheduled for six issues in 1987-88. In addition to Linda Crow, some of the authors include Tony Lawson, Jane Butler Kahle, Robert Allen, and John Penick.

## **APPENDIX A**

RESEARCH INTERESTS OF  
CLASSROOM TEACHERS

Please take a few moments to complete this questionnaire. Your comments will help shape the policies of NSTA's ETR program, as well as the National Association for Research in Science Teaching's publication entitled, "Research Matters...To the Science Teacher."

First, tell us about you...

(Unless otherwise instructed, please circle the appropriate information concerning yourself and your ideas in the items below):

1. Age: a. 21-25 b. 26-30 c. 31-40 d. 41-50 e. over 50
2. Sex: a. female b. male
3. Highest degree earned: a. Bachelors b. Masters c. PhD
4. Location of school: a. Rural b. Urban c. Suburban
5. Type of school: a. Public b. Private
6. Are you a: a. classroom teacher b. resource room teacher c. librarian d. principal e. other\_\_\_\_\_
7. Describe your school: a. elementary b. middle school c. junior high d. high school e. college/university
8. List your years of teaching experience\_\_\_\_\_
9. List your years of administrative experience\_\_\_\_\_
10. ~~If you are presently teaching~~, please circle all of the following that apply: elementary science (list grades) \_\_\_\_\_, general science, life science, earth science, physical science, biology, chemistry, physics, other (please specify)\_\_\_\_\_.

What decisions do you make?

(Circle the appropriate underlined word below):

11. I make most some none of the important decisions related to the science curriculum for my students.
12. I make most some none of the decisions related to texts and supplemental materials for my science students.

13. I make most some none of the important decisions related to instructional methods for my science classes.
14. I make most some none of the important decisions related to test selection for my science students.
15. I have many some no opportunities during the school day to talk to my colleagues about science teaching.
16. I have many some no opportunities during the school day to discuss research findings with my colleagues.
17. I have many some no opportunities to observe my colleagues teach science.
18. My principal frequently infrequently never provides me with useful guidance on science instructional matters.
19. I frequently infrequently never use research findings to guide instructional decisions.
20. If you could make one decision to improve the science education program in your school, what would that be? \_\_\_\_\_

*I frequently infrequently interact with individuals in higher education*

How important is research in the following educational areas to you? Please read each item and indicate how helpful research in the area is/would be to you. Circle your answer using the following scale:

Extremely Helpful	Helpful	I don't know	Sometimes Helpful	Useless
1	2	3	4	5

Research related to:

Curriculum development	1	2	3	4	5
Instructional strategies	1	2	3	4	5
Evaluation of student performance	1	2	3	4	5
Cognitive development & learning styles	1	2	3	4	5
Classroom management	1	2	3	4	5
Effective use of printed materials	1	2	3	4	5
Use of microcomputers in science classes	1	2	3	4	5
Student attitudes	1	2	3	4	5
Hands-on/laboratory oriented science	1	2	3	4	5
Teaching the process skills	1	2	3	4	5
Problem solving	1	2	3	4	5
Student misconceptions	1	2	3	4	5
Science for special needs students	1	2	3	4	5
Sex differences and learning	1	2	3	4	5
Integrating science, technology, and societal issues in the classroom	1	2	3	4	5
Staff development	1	2	3	4	5
Interdisciplinary science	1	2	3	4	5
Characteristics of learners	1	2	3	4	5

"Research Matters...To The Science Teacher"

Your facilitator will be selecting a "Research Matters..." for you to review. This will be used in your ETR discussion. Before your discussion begins, please answer the following questions. (

"Research Matters..." Title: \_\_\_\_\_

Circle your response for the following items:

The topic is...

very interesting    fairly interesting    not interesting

The article is...

too lengthy    just right    too short to be meaningful

The writing is...

too technical    about right    excellent, well written

I would...

read similarly written articles on most any topic  
be interested in selected topics  
not be interested in such articles

What topics would you recommend for future "Research Matters..." articles:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

Is there a particular research area that you would like to participate in as an active researcher? Please specify the topic. List your name and address if you would like information on this topic and/or for someone to contact you regarding your interest.

Questionnaire developed by:

Rodger W. Bybee, NARST Research Coordinator  
William C. Kyle, Jr., NSTA Research Division Director

**ELECTION COMMITTEE**

Chairman

James P. Barufaldi (1988)  
Science Education Center EDB 340  
The University of Texas at Austin  
Austin, Texas 78712  
512-471-7354

Members

Rodney L. Doran (1988)  
553 Blady Hall  
SUNY at Buffalo  
Amherst, New York 14260  
716-292-4161

Stanley L. Helgeson (1988)  
Science and Mathematics Education  
The Ohio State University  
Columbus, Ohio 43212  
614-292-4121

The Nominating Committee is responsible for establishing the slate of officers for each election four months prior to the date of the Annual Meeting, making arrangements for preparation and distribution of ballots three months prior to the date of the Annual Meeting, tabulating election results, notifying candidates of the outcome of the election a month prior to their assuming office, announcing election results at the Annual Meeting, and arranging for installation of new officers and transfer of responsibilities of the Executive Board for the Association.

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

## **PUBLICATIONS ADVISORY COMMITTEE**

### Chairman

Ronald G. Good (1989)  
Department of Curriculum & Instruction  
Louisiana State University  
Baton Rouge, Louisiana 70803  
504-388-2331

### Members

James D. Ellis (1990)  
BSCS  
1115 N. Cascade Ave.  
The Colorado College  
Colorado Springs, CO 80903  
303-473-2233

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

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

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

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

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

## EXECUTIVE SECRETARY

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

Organized to improve science teaching—through research

# NARST

NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

## PRESIDENT

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

## PRESIDENT-ELECT

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

TO: Linda De Ture

FROM: Jim Barufaldi, Chair JB  
Stan Heigelson  
Rod Doran

## IMMEDIATE PAST PRESIDENT

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

RE: Report of the Elections Committee

## BOARD MEMBERS-AT-LARGE

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

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

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

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

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

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

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

DATE: October 5, 1987

The Elections Committee is pleased to present the following ballot for the 1988 election. Each of the nominees has been contacted and has agreed to have his/her name placed in nomination and to serve if elected.

For President-elect: Marcia C. Linn, University of California,  
Berkeley  
William G. Holliday, University of  
Maryland

For Board Members-at-Large: Gerald Abegg, Boston University  
Lowell J. Bethel, The University  
of Texas at Austin  
Robert D. Sherwood, Peabody/  
Vanderbilt  
J. Nathan Swift, SUNY-Oswego

## JOURNAL EDITOR

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

Recommended Action of the Board: We move that the report of the  
Elections Committee be accepted.

## RESEARCH COORDINATOR

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

**AWARDS STEERING COMMITTEE**

Chairman

Michael J. Padilla (1988)  
Department of Science Education  
University of Georgia  
Athens, Georgia 30602  
404-542-1763

Members

Anton E. Lawson (1990)  
Department of Zoology  
Arizona State University  
Tempe, Arizona 85287  
602-965-2540

Ann C. Howe (1990)  
Math & Science Education  
Box 7801  
N. Carolina State University  
Raleigh, North Carolina 27695-7801  
919-737-2238

Marianne B. Betkouski (1990)  
Education/Curriculum & Instruction  
University of North Florida  
Jacksonville, Florida 32216  
904-646-2578

Richard R. Tolman (1989)  
Box 72 McKay  
Brigham Young University  
Provo, Utah 34602  
301-378-3177

Frank E. Crawley (1989)  
Science Education Center EDB 340  
The University of Texas at Austin  
Austin, Texas 78712  
512-471-7354

John R. Staver (1988)  
School of Education  
University of Illinois at Chicago  
Chicago, Illinois 60655  
312-996-5630



THE UNIVERSITY OF GEORGIA  
Department of Science Education  
212 Aderhold Hall  
Athens, Georgia 30602

College of Education

(404) 542-1763

October 20, 1987

Dr. Linda DeTure  
School of Education  
Rollins College  
Winter Park, FL 32789

Dear Linda:

Regarding operating policies of the JRST award steering committee, none have been formally established. I offer the following as the de facto operating policy that we followed last year and this. We have had two major responsibilities

1. To set policy related to NARST awards
2. To administer the NARST Distinguished Contributions to Science Education Through Research award.

During the last 3 or 4 years the awards steering committee established policy related to the Distinguished Contributions award, including its description and review and rating procedures. We also reviewed and sometimes changed policies related to the NARST Best Paper award, the JRST award and the Practical Applications awards. To carry out these duties the committee has met at each annual meeting and communicated via the mail.

Continued monitoring of all awards is an essential component of the awards steering committee work.

Sincerely,

A handwritten signature in cursive script, appearing to read "Michael J. Padilla".

Michael J. Padilla  
Professor

MJP/js

Encl.



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

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

March 11, 1986

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

PRESIDENT-ELECT  
Dr. James P. Barufaldi  
Science Education Center  
E0B 340  
The University of Texas at Austin  
Austin, Texas 78712

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

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

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

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

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

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

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

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

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

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

Dear Award Committee Member:

After a year of work the awards committee needs to meet to discuss issues and our direction for the next year. We will meet on Friday evening, March 28, at 8:30 - 10:00 p.m., in room 1 of the Meridien Hotel.

We need to discuss the following issues and perhaps others:

- the rating for the NARST and JRST awards
- the rating for the Distinguished Contributions Award
- the best dissertation award.

I'll see you in San Francisco.

Sincerely,

Michael J. Padilla  
Chairman, Awards Committee

MJP/js

P.S. Hope it won't take this long.



THE UNIVERSITY OF GEORGIA  
Department of Science Education  
212 Aderhold Hall  
Athens, Georgia 30602

College of Education

(404) 542-1763

February 3, 1987

Dr. Peter A. Rubba, Jr.  
Room 160 Chambers Building  
Pennsylvania State University  
University Park, PA 16802

Dear Dr. Rubba:

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

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

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

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

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

Your final ratings should be sent back to me by February 23, 1987. If you have questions about the process, please feel free to call.

Sincerely,

Michael J. Padilla  
Chairman, Awards Committee

NARST Award for  
Distinguished Contributions to Science Education Research

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

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

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

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

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

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

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

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

Name of Nominee \_\_\_\_\_

Reviewer \_\_\_\_\_

Please rate each individual using this numerical rating scale.

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

Specific Criteria

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

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

NARST AWARD  
FOR  
DISTINGUISHED CONTRIBUTIONS TO SCIENCE EDUCATION RESEARCH  
QUALITATIVE RATING SHEET  
(Complete once only for all candidates after  
reviewing all applications)

Reviewer \_\_\_\_\_

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

- |  |          |          |
|--|----------|----------|
| 1. Research contributiond have been substantial                                      | 1. _____ | 2. _____ |
|  | 3. _____ | 4. _____ |
| 2. Research contributions have continued over many years (at least 15)               | 1. _____ | 2. _____ |
|  | 3. _____ | 4. _____ |
| 3. The individual has provided leadership in Science Education through research      | 1. _____ | 2. _____ |
|  | 3. _____ | 4. _____ |
| 4. The individual has had a significant impact on Science Education through research | 1. _____ | 2. _____ |
|  | 3. _____ | 4. _____ |

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

1. \_\_\_\_\_
2. \_\_\_\_\_

(over)

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

First Ranked Person

- 1. \_\_\_\_\_  
\_\_\_\_\_
- 2. \_\_\_\_\_  
\_\_\_\_\_
- 3. \_\_\_\_\_  
\_\_\_\_\_
- 4. \_\_\_\_\_  
\_\_\_\_\_

Second Ranked Person

- 1. \_\_\_\_\_  
\_\_\_\_\_
- 2. \_\_\_\_\_  
\_\_\_\_\_
- 3. \_\_\_\_\_  
\_\_\_\_\_
- 4. \_\_\_\_\_  
\_\_\_\_\_

**JRST AWARDS COMMITTEE**

Chairman

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

Members

Earl J. Montague (1988)  
Science Education Center EDB 340  
The University of Texas at Austin  
Austin, Texas 78712  
512-471-7354

Piyush Swami (1988)  
College of Education  
University of Cincinnati  
Cincinnati, Ohio 45221-0002  
513-475-3561

Julie P. Sanford (1990)  
Science Teaching Center  
The University of Maryland  
College Park, Maryland 20742  
301-454-7346

Kenneth G. Tobin (1990)  
Science Education  
Florida State University  
Tallahassee, Florida 32306  
904-646-2578

Kevin C. Wise (1990)  
Curriculum and Instruction  
Southern Illinois  
Carbondale, Illinois 62901  
618-536-2441 ex 229

James J. Gallagher (1990)  
327 Erickson Hall  
Michigan State University  
East Lansing, Michigan 48824  
517-355-1725

Pat Obenauf (1988)  
604-P Allen Hall  
West Virginia University  
Morgantown, West Virginia 26506  
304-293-3442

Donald R. Daug (1988)  
UMC 28  
Utah State University  
Logan, Utah, 84322  
801-750-1130

Frances Lawrenz (1990)  
Dept of Curriculum and Instruction  
159 Pillsbury Dr. S.E.  
University of Minnesota  
Minneapolis, MN 55455  
612-625-2074

Charles R. Ault, Jr.(1989)  
Teacher Education Program Box 14  
Lewis and Clark College  
Portland, OR 97219

Ron Bonnstetter (1989)  
211 Henzlik Hall  
University of Nebraska  
Lincoln, NE 68588-0355  
402-472-2443

Richard Duschl (1989)  
Curriculum & Instruction  
University of Houston-Un.Pk.  
Houston, TX 77004  
713-749-1686

Joseph P. Riley (1990)  
212 Aderhold Hall  
University of Georgia  
Athens, GA 30602  
404-542-1763

Edmund A. Marek (1990)  
Rm 323 Phys. Sc. Bldg.  
University of Oklahoma  
Norman, OK 73019  
405-325-5723

**NARST AWARDS COMMITTEE**

Chairman

Fred Finley (1990)  
159 Pillsbury Dr. S.E.  
University of Minnesota  
Minneapolis, MN 55455  
612-625-2074

Members

Michael A. Dryden (1990)  
Department of Physics  
Arizona State University  
Tempe, Arizona 85287  
602-965-4364

Mary M. Atwater (1988)  
223 Chestnut St. S.W.  
Atlanta University  
Atlanta, Georgia 30314  
404-681-0251

Linda L. Cronin (1990)  
Science Education  
Norman Hall  
University of Florida  
Gainesville, Florida 32611  
904-393-0761

Joseph S. Krajcik (1990)  
Science Teaching Center  
The University of Maryland  
College Park, Maryland 20742  
301-454-7346

Eugene L. Chiappetta (1990)  
Education  
University of Houston  
Houston, Texas 77004  
713-749-1624

Mary Westerback (1988)  
54 Smith St.  
Glen Head, New York 11545  
516-671-0426

Michael D. Piburn (1990)  
1253 West Minister Ave.  
Westminister College  
Salt Lake City, Utah 846691  
801-485-6691

David L. Haury (1990)  
Department of Education  
Tufts University  
Medford, MA 02155  
617-381-3244



UNIVERSITY OF MINNESOTA  
TWIN CITIES

Department of Curriculum and Instruction  
College of Education  
Peik Hall  
159 Pillsbury Drive S.E.  
Minneapolis, Minnesota 55455-0208

TO: NARST Executive Board  
From: Fred N. Finley  
Date: November 5, 1987  
Re: NARST Paper Awards

During the Fall 1987 the NARST Awards Committee received twelve papers that were submitted for the Outstanding Research Paper Award and seven papers submitted for the Practical Applications Award. All of those papers have been processed and sent to the committee members. The committees evaluations of the papers will be results will be returned in January, tabulated and forwarded to Dr. DeTure in early February.

It should be noted that one committee member has indicated he will be unable to review papers this year. That leaves a committee of seven instead of eight members. If the by-laws require an eighth member then there would still be time to appoint someone. However, my own judgment would be that this is not necessary to insuring a valid and reliable evaluation of the papers.

The only concern that I have at the moment is that the number of papers that each committee member must read (19) is substantial. If too many papers must be read by any one individual the quality of the evaluations may suffer somewhat under the time demands that reviewers face. If the numbers of papers increases it may be advisable to form a slightly larger review committee that could be divided into a subcommittee for each award.

**REPRESENTATIVE TO THE ADVISORY BOARD**

**Investigations in Science Education**

John J. Koran Jr.  
Graduate School and International Studies  
Grinter Hall 237  
University of Florida  
Gainesville, Florida 32611  
904-392-4646

**REPRESENTATIVE TO THE INTERNATIONAL COUNCIL  
OF ASSOCIATIONS FOR SCIENCE EDUCATION  
(ICASE)**

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

**REPRESENTATIVE TO THE AMERICAN ASSOCIATION  
FOR THE ADVANCEMENT OF SCIENCE**

J. David Lockard  
The International Clearinghouse  
University of Maryland  
College Park, Maryland 20742  
301-454-4028

**NARST ARCHIVIST**

Paul Joslin  
Drake University  
Des Moines, Iowa 50311  
515-271-3991



# DRAKE UNIVERSITY

Graduate School of Education

TO: NARST Board

DATE: October 20, 1987

FROM: Paul Joslin

REGARDING: Fall 1987 Report

1. We're moving along steadily on the NARST History and have submitted a program proposal for the 1988 meeting to report selected intriguing anecdotes. We'll plan a full report in 1989.
2. Thanks for the support of the project. We'll apply this to special travel, but primarily towards Karen Murphy's non-reimbursable phone and postage expenses.
3. The board, or you, should decide whether the out-going president should receive the traditional "Thank-you plaque" at the meeting he/she turns the gavel over, or the following year at the meeting he/she retires as the past-president. We had a bit of confusion over this last spring and I'd like to avoid that in 1988.

PHJ/hb

P.S. Just got your 10/9/87 letter on 10/19/87!

xc: K. Murphy



The Ohio State University

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Education

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1200 Chambers Road  
Columbus, Ohio 43212-1792

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292

46  
49

## INVESTIGATIONS IN SCIENCE EDUCATION

Patricia E. Blosser, editor <sup>ARB</sup>  
Stanley L. Helgeson, associate editor

Investigations in Science Education is a quarterly publication, funded by The Center for Science and Mathematics Education, The Ohio State University, and produced by the ERIC Clearinghouse for Science, Mathematics, and Environmental Education with the sponsorship of the National Association for Research in Science Teaching.

At least two of the five members of the ISE advisory board are appointed by NARST and the other three advisory board members, appointed by the ERIC science education portion of the clearinghouse, are NARST members.

The function of ISE is to provide a new perspective on research articles, aid in the improvement of writing of research reports and articles, provide useful suggestions for the preparation of research reports, and serve as a device which might be used for training in the writing of research articles.

Articles selected for critical review and publication in NARST are drawn from those appearing in refereed journals. JRST and Science Education provide the primary sources but not the only sources. Doctoral dissertations and papers presented at professional meetings are not used for critical review, based on the assumption that these materials have not had the careful scrutiny of editorial board members using known criteria. Articles are xeroxed and sent for review based on a matching process with the reviewer's areas of interest/expertise as indicated on a reviewer's form.

To date one issue of ISE for 1987 has been prepared and is in print. Sufficient manuscripts are available for at least two more issues. The factor impeding publication is one of time, with the 1988 NARST program activities taking precedence to ISE production.

While new reviewers for ISE are welcome, there is some question of continued publication. The ERIC Clearinghouse for Science, Mathematics and Environmental Education is in its final quarter of its current contract. Present plans are to bid for the new RFP which, if awarded, would result in a five-year commitment for the clearinghouse. If the clearinghouse should be awarded to some other group at another institution, it is doubtful that OSU would support continued publication of ISE.

## REPORT FROM EXECUTIVE SECRETARY

GLENN C. MARKLE

### 1. Membership

NARST's journal-receiving membership as of October 1, 1987 was 609 regular members, 87 student members, and 3 emeritus member, a total of 711 members. In addition we have thirty-one emeritus members and thirteen student members who do not subscribe to the journal. Our dues-paying membership is approximately fifteen percent higher this year than last.

Practicing classroom teachers make up a significant portion of the one-hundred or so new members. The Bylaws state that:

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

To date, I have operated on the assumption that "interest" and a willingness to pay the annual dues is sufficient to justify accepting potential members. Do I have a responsibility to "screen" applicants to assure that they satisfy the criteria for membership? If so, how should this screening be done? I would greatly appreciate guidance from the Board on the issue of who qualifies to be a member of NARST.

### 2. Emeritus Status Application

I have received no requests for emeritus status in NARST since the Spring meeting of the Board.

///

3. St. Louis in 1988

Arrangements have been made for the 1988 meeting to be held at the Lodge of the Four Seasons in Lake Ozark, MO, April 10-13, 1988. The room charges for NARST members will be \$60.00 per day for a single or double/twin room.

I recommend that the registration fee for the 1987 conference be set at \$65.00 (awards luncheon included), but that a special rate for students and emeritus members be set at \$25.00.

4. San Francisco in 1989

During the past summer I visited four potential sites for our 1989 meeting in San Francisco: the Meridian Hotel, the Ramada Renaissance Hotel, and the Sheraton Palace Hotel in downtown San Francisco and the Asilomar Conference Center in Pacific Grove, CA (approximately sixty miles from San Francisco). I have materials to distribute describing these sites. We need to select a meeting site during the Fall Board meeting.

A potential problem is the meeting dates for the 1989 conference. Easter Sunday is March 26, 1989 and AERA is scheduled to meet from March 27 through April 1, 1989. San Francisco is booked "city-wide" for the weeks of March 27th and April 2nd. None of the convention hotels contacted were able to give us special rates during those weeks or promise reasonable meeting space (I contacted six different hotels including the Meridien, Sheraton Palace, Ramada Renaissance, San Francisco Hilton, Westin St. Francis, and Holiday Inn Union Square). The week before AERA was generally open for all the hotels. However, if we meet on Wednesday through Saturday of the week before Easter, we will need to schedule sessions on Good Friday, and many of our members may be forced to stay over Easter Sunday to attend AERA or to qualify for special reduced air fares. These are matters that need to be discussed by the Board.

The three meeting sites which seem best suited for our needs if we hold our meeting the week before Easter are the Meridien, the Sheraton Palace, and the Ramada Renaissance. A summary of the proposals submitted by each is attached.

5. Legal Matters

After reviewing the material I submitted in April, the Internal Revenue Service waived the \$1900.00 penalty they levied against NARST for failure to file our 1985 tax forms in a timely manner. (The IRS claimed they had not received our tax forms even though they had been submitted in April, 1985 and copies had been mailed upon request in October, 1985.)

Our legal representative in New York is continuing to negotiate with John Wiley and Sons regarding the contract to publish JRST. Wiley agreed to all the request submitted in July but wants to raise the price of the Journal each year for the next five years and reach \$29.00 per volume in 1992 (an increase of 45% over the life of the contract). I've indicated that this is unacceptable and that we need to have a set price for the five year period so that dues do not have to be increased each year. I suggested the 1988 price of \$24.00 per volume for the five year period. This represents approximately a 25% increase in the price of the Journal during the past five years (e.g. about 5% per year at the end of the period rather than a 20 percent increase the first year and somewhere between three and eight percent per year each year of the contract). The attached letter is the lawyer's report on the negotiations.

6. Budget

The budget report for 1986, the budget summary for '87 through September 30, and the proposed budget for 1988 are attached. While we appear to be financially sound, our cushion of approximately \$7000.00 includes the \$8000.00 we received from the University of Calgary for the canceled check which may yet be found to be an error.

NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

POTENTIAL HOTEL SITES FOR THE 1989 ANNUAL MEETING IN SAN FRANCISCO, OH

<u>Factor</u>	<u>Sheraton Palace</u>	<u>Hotel Meridien</u>	<u>Ramada Renaissance</u>
Hotel Description/Ambience	Traditional hotel; large guest rooms; meeting rooms adequate and generally located in the same area of the hotel; clean; we would be the primary group in the hotel the week before Easter; the Palace is not available the week after Easter.	Modern hotel; moderate sized guest rooms; nice meeting rooms but we would probably need to have rooms meeting rooms on both the second and third floor; hotel is relatively new and clean; we would have to pay "rack rates" the week after Easter; our 1985 annual meeting was at the Meridian Hotel.	Very modern hotel, new, most fancy of the three; guest rooms slightly larger than the Meridian; meeting rooms in the same general area; we would be the primary group in the hotel either the week before or the week after Easter.
Dates for Which Bids were Submitted	Thursday, March 23 through Sunday, March 26, 1989	Tuesday, March 22 through Sunday, March 26, 1989	Thursday, March 23 through Sunday, March 26, 1989
Room Charges to Members	Single: \$ 89.00 Double: 104.00 Suites: 225.00 and up Extra Person: \$15.00  Plus City Tax of 11%  <i>\$297 3 nights - single 183 - double</i>	Current rate, subject to change of at most 5%.  Single: \$ 95.00 Doubles: 115.00 Suites: 290.00 and up  Plus city tax of 11%  <i>\$316 201</i>	Current rate, subject to change of at most 5%.  Single: \$ 115.00 <i>double</i> Double: 130.00 Suites: 195.00 and up  Plus city tax of 11%  NOTE: After phone discussion, agreed to a rate of \$115.00 for a single or double. <i>\$33 192</i>

Reservation Cut off Date

February 29, 1989

February 22, 1989

February 22, 1989

Reservation Procedures

Three choices: by hotel reservation cards provided by the hotel, a rooming list provided by us, or on a form provided by the Association.

All reservations held until 3:00 pm unless prepayment arranged.

Hotel reservation cards provided by the hotel. Phone reservations are accepted but members must identify themselves as part of NARST. VIP reservation list needed 30 days in advance.

Complementary housing forms provided by the hotel. Reservations must be made 30 days in advance. Guarantee required for arrival after 6:00 pm.

Complimentary Accommodations

Not mentioned in contract submitted by the Palace. During my visit, the sales representative indicated one complimentary room for each 50 rooms booked.

Based on the final use of our room block, one complimentary room for every 50 actually utilized. "Of course, these rooms can be allotted in various combinations of single, doubles, or parlors as you desire.

In addition to the one per fifty, the Meridian will comp two one bedroom suites over our major meeting dates for the President and the editor of the journal. The Meridian will also arrange for limousine transfers from the airport for the Executive Board.

One complimentary guest room for every 50 rooms actually utilized, based on a cumulative basis. Bedroom suites count as two units.

The number of complimentary rooms will be set five working days prior to the group's arrival based on the number of reservations received at that time.

Function Space

Reservation/Office available on a 24 hour basis throughout the meeting.

A general session room that seats 300 available 8:00 to 5:00 on the days of our meeting (contract indicates Friday through Sunday, but they are flexible on Wednesday through Saturday)

Five or six breakout rooms that seat 30-60 people throughout the meeting.

Board meeting room on the first and last day of the conference.

Reservation area outside the meeting rooms with storage space available.

General session room that seats 250+ people available throughout the day, throughout the convention.

Five or six breakout rooms that seat 30-60 available throughout the meeting.

Conference room for Board on the first and last day of the meeting.

Reservation area outside meeting rooms.

General session room that seats 250+ available throughout the convention.

Six concurrent session rooms available throughout our meeting.

Board meeting room on the first and last days of the convention.

Meeting Space Rental

"The amount of meeting room rental charges will be related directly to the number of guest rooms occupied. There will be a \$600.00 per day charge for meeting space. If your room block falls below 30% or more of the original block there will be \$1200.00 per day rental fee."

"No charge of function space with 180-200 rooms occupied. If less than 179 rooms - charges as shown"

\$750.00 for Board Meeting room for each day the room is scheduled;

\$750.00 for general session room for each day of the conference;

\$100.00 meeting room rental per breakout room for each day of the conference.

"Based upon present contractual arrangements, the following sliding scale will be invoked concerning charges for your meeting space:

Tot Room Nights	Rental
810 or above	Waived
769-809	\$1000
731-768	1200
694-730	1500
659-693	1800

NOTE: After discussion, agreed to waive meeting room rentals.

Cancelation of Agreement

6 months to 1 year, 25% of anticipated room revenue must be paid by NARST to Sheraton Palace;

3 - 6 months, 50%;

30 days to 3 months, 75%

within 30 days, 100%

The number of rooms tentatively reserved, 202.

Full function room charges for cancellation 30 days or less prior to arrival.

Any deposits originally received upon confirmation will be forfeited upon cancellation and credited to the total cancellation fee due.

"We do not wish to jeopardize future relationships and with this in mind, should cancellation take place and rebooking occur within twelve (12) months from the original arrival date, any cancellation funds collected will be applied to the Group Master Account for that rebooking."

Should this meeting be cancelled after signature of this contract, a cancellation fee will applied for all rooms not sold on your peak night.

The sum will be determined by multiplying the number of unsold rooms, not to exceed the room block on peak night, by your groups minimum single room rate.

## Credit Billing

Members are responsible for settling room bills.

For Association-reserved rooms, "all incidental charges will be settled by the individuals upon check-out; room and tax charges will be billed directly to the master account along with the catering and function room rental charges.

Payment of anticipated charges due in advance unless a credit application is approved."

"All individual attendees will be responsible for room, tax and incidental charges upon departure unless specific billing instruction are received in writing and approved by the Hotel Meridien Credit Department thirty (30) days in advance of arrival.

In the event a master account is requested, a credit application will be required, indicating the responsible party or parties in charge of the master account. AT the same time, specific information should be established concerning authorized charges to the master account.

Under normal circumstances, the Meridien requests the review of any or all charges to the master account and approval before departure. At that time, final payment or a portion of that payment should be made to the Hotel unless specific billing instructions have been requested and approved thirty (30) days in advance."

"In order to set up a master account, the enclosed credit application must be completed and returned to my attention."

## Awards Luncheon

A \$20.00 awards luncheon can be served by the hotel.

A \$20.00 awards luncheon can be served by the hotel.

A \$20.00 awards luncheon can be served by the hotel.

Coffee Breaks

\$2.50 per person + 15%  
service and 6.5% sales  
tax.

\$2.50 per person + 15%  
service and 6.5% sales  
tax.

\$2.00 per person + 15%  
service and 6.5% sales  
tax.

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ROBERT J. DWYER

October 6, 1987

Dr. Glenn Markle  
Executive Secretary  
NARST  
University of Cincinnati  
Cincinnati, Ohio 45221-0002

Re: NARST -- Wiley Contract

Dear Dr. Markle:

At long last (after some prompting), Wiley has responded to the proposed contract modifications which I sent them by my letter of June 15. Basically, the response is that they accept the proposed changes (with what they described as same unstated minor cosmetic comments), but propose that the subscription price to NARST members be raised from \$20 per volume (¶ 4) to \$24 in 1988, \$25 in 1989, \$27 in 1990, \$28 in 1991 and \$29 in 1992. Let me know your thoughts on this counterproposal, and I will get back to them (or arrange a businessperson-to-businessperson conversation).

Sincerely yours,



Robert J. Dwyer

/daa

NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

PROPOSED BUDGET FOR 1988

RECEIPTS

1.	Balance Brought Forward		\$ 8,872.00
	General Funds	\$ 6000.00	
	Delta Project	2872.00	
2.	Membership Dues		34,590.00
	Regular (600 @ \$54.00)	\$32,400.00	
	Student ( 70 @ \$30.00)	2,100.00	
	Emeritus ( 3 @ \$30.00)	90.00	
3.	Annual Meeting		
	Preregistration (250 @ \$55.00)	\$13,750.00	
	Late Registration (50 @ \$65.00)	3,250.00	
	Workshop Registration (60 @ \$10.00)	600.00	
		4000.00	
			52,800.00
4.	Other		
	Renting Mailing Labels	\$ 300.00	
	Royalties from Wiley	2000.00	
	Contributions from the University of Georgia (Journal Editor)	26,000.00*	
	Contributions from the University of Cincinnati (Exec. Sec.)	24,500.00**	

TOTAL EXPECTED RECEIPTS

\$113,862.00

*119,362.00*

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

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

*put budget on agenda for adv. committee*

*17,500.00 22,100.00  
17,600.00  
new fees reg.*

*70 80*

## NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

DISBURSEMENTS

1.	<u>Journal of Research in Science Teaching</u>	\$43,152.00
	Wiley Publishers (673 @ \$24.00)	\$16,152.00
	Journal Editor Salary*	19,000.00
	Journal Secretary*	7,000.00
	Journal Postage and Supplies	1,000.00
2.	Annual Meeting	\$18,000.00
	Programs (650 @ \$4.00)	2,600.00
	Abstracts (650 @ \$2.00)	1,300.00
	Awards	300.00
	Training Sessions	400.00
	Travel/Hotel	400.00
	Speakers (2 @ \$600.00)	1,200.00
	Travel/Hotel	600.00
	Supplies/AV	1,000.00
	Travel for Editor and Exec. Sec.	2,000.00
	Travel for 1988 Program Site Review	1,800.00
	Pres. Elect/Exec. Sec.	
	Awards Banquet (300 @ \$20.00)	6,000.00
	Coffee Breaks (2 @ \$200)	400.00
3.	Officers/Executive Board	\$ 8,100.00
	President Elect	700.00
	President	1,000.00
	Past President	700.00
	Executive Board Meetings	
	Spring - Lake Ozark, MO	500.00
	Fall (13 @ \$400.00)	5,200.00
4.	Executive Secretary	\$28,200.00
	Executive Secretary Salary (33%)	\$17,000.00**
	Secretary	7,500.00**
	Supplies/Printing	1,500.00
	Postage	1,200.00
	Telephone	750.00
	Miscellaneous	250.00

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

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

5. Other \$ 7282.00

ICASE	60.00
Triangle Coalition	100.00
Newsletter (4 Issues)	4000.00
Research Matters	250.00
Delta Testing Monograph	2872.00

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TOTAL DISBURSEMENTS \$104,734.00

SUMMARY

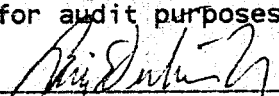
Initial Balance	\$ 8,872.00
Anticipated Receipts	\$104,990.00
Anticipated Expenses	\$104,734.00
Anticipated End of Year Balance	\$ 9,128.00

**STATEMENT OF TRUSTEE EXPENDITURES  
FOR THE YEAR ENDING DECEMBER 31, 1986  
WITH COMPARISONS MADE FROM STATEMENT OF 1985 AND 1984**

Sources of Funds: National Association for Research in Science Teaching  
Trustee: Markle, Glenn C.  
Purpose of Fund: Accounting Service  
University Account: 0-81290-0000-006-60

	<u>1986</u>	<u>1985</u>	<u>1984</u>
<b>Funds Available for Expenditures:</b>			
Balance Forward	\$11,930.00	\$ 4,646.00	\$ 4,086.00
Revenue	43,352.54	43,121.00	39,046.00
Local Donation			2,207.00
	<u>55,282.54</u>	<u>47,767.00</u>	<u>45,650.00</u>
<b>Expenditures</b>			
Clerical & Stenographic	\$ 0.00	\$ 211.00	\$ 758.30
Materials	298.90	470.00	84.23
Courier Service	0.00	154.00	55.47
Office Supplies and Printing	8,636.41	5,496.00	4,736.25
Programs, Periodicals, & Awards	27,851.01	12,156.00	12,696.52
Postage	989.71	2,661.00	2,990.19
Telephone	199.63	2,590.00	3,778.05
Travel	11,288.26	11,266.00	14,563.92
Entertainment	810.00	37.00	249.53
Legal & Professional Fees	0.00	783.00	52.49
Bank Charges, Canadian Checks	182.90		
	<u>\$50,196.82</u>	<u>\$35,824.00</u>	<u>\$39,965.00</u>
<b>Total Expenditures</b>			
Encumbrances	525.00		
Unspent balance	4,560.72	11,943.00	5,685.00
Revenue deferred	0.00	62.00	573.00
Unspent Balance	4,560.72	11,881.00	5,112.00

I hereby certify that the expenditures summarized above were paid on behalf of the Trustee and that vouchers are available for audit purposes.

  
\_\_\_\_\_  
Louis Fisher, Fiscal Officer  
College of Education

NARST BUDGET SUMMARY - 1987  
September 30, 1987

	Initial Balance	Encumbered Funds	Budget Balance For 1987
General NARST Funds	1688.10	525.00	1163.10
Delta Project Funds	2872.62	0.00	2872.62
<b>TOTAL FUNDS</b>	<b>4560.72</b>	<b>525.00</b>	<b>4035.72</b>

INCOME SUMMARY

ITEM	BUDGET	RECEIPTS	BUDGET BALANCE FOR 1987
Membership Dues	26390.00	29610.00	3220.00
Other Income	52100.00	61780.43	9680.43
Annual Meeting Income	17600.00	15879.00	-1721.00
UC Deposit, source unknown (see Sept. 30 statement)		103.50	103.50
<b>BUDGET AND RECEIPTS TOTAL</b>	<b>96090.00</b>	<b>107372.93</b>	<b>11282.93</b>

EXPENDITURE SUMMARY

	BUDGET	DISPERSEMENTS	ENCUMBERED	BUDGET BALANCE
Member Expenses inc. Journal	12500.00	121.00	15751.00	-3372.00
Journal Postage/Supplies	1000.00	1000.00	0.00	0.00
Annual Meeting	16603.00	18370.47	2012.50	-3779.97
Officer/Board Expenses	8550.00	3317.60	0.00	5232.40
Executive Sec. Expenses	3800.00	2428.42	0.00	1371.58
Research Matters	500.00	831.90	0.00	-331.90
Newsletter	4000.00	2899.50	950.00	150.50
Delta Project	2875.00	0.00	0.00	2875.00
Other (Triangle Col & ICASE)	310.00	55.00	100.00	155.00
U.G.A. & U.C. CONTRIBUTIONS*	50500.00	50500.00	0.00	0.00
<b>BUDGET &amp; DISPERSE. TOTAL</b>	<b>100636.00</b>	<b>79523.89</b>	<b>18813.50</b>	<b>2300.61</b>

\* NON-CASH CONTRIBUTIONS. JOURNAL EDITOR AND EXECUTIVE SECRETARY SUPPORT

NARST BUDGET, RECEIPTS AND EXPENDITURES  
Through 9/30/87

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		NARST GENERAL FUNDS RECEIPTS		
Membership Dues		BUDGET	RECEIPTS	CATEGORY BUDGET BALANCE
	Regular '87 609		26620.00	
	Student '87 99		2752.00	
	Emeritus '87 3		90.00	
	1988 Dues 1		118.00	
	1989 Dues 1		30.00	
	Dues Summary	26390.00	29610.00	3220.00
Annual Meeting		BUDGET	RECEIPTS	
	Registrations	17000.00	15169.00	
	Training Sessions	600.00	710.00	
	Meeting Summary	17600.00	15879.00	-1721.00
Other Income		BUDGET	RECEIPTS	
Mailing Lists	Renting Labels		500.00	
Journal	Wiley Royalties	1600.00	2171.70	
Donations	10 Donations		100.00	
Misc.	Misc. Income		508.73	
	Univ. of Calgary		8000.00	
	U. Ga., Editor, Sup.	26000.00	26000.00	
	U.C., Exec. Sec. Sup.	24500.00	24500.00	
	Other Income Summary	52100.00	61780.43	9680.43

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RECEIPT SUMMARY	BUDGET	RECEIPTS	BUDGET BALANCE
Membership	26390.00	29610.00	3220.00
Annual Meeting	17600.00	15879.00	-1721.00
Other Income	52100.00	61780.43	9680.43
<b>TOTAL</b>	<b>96090.00</b>	<b>107269.43</b>	<b>11179.43</b>

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EXPENDITURES BY BUDGET  
CATEGORIES

MEMBERSHIP	BUDGET	EXPENDITURE	ENCUMBERED	CATEGORY BUDGET BALANCE
10/ /87 JRST Volume 24	12500.00		15642.00	
5/1/87 Refund Gann		55.00		
5/1/87 Refund Conwell		11.00		
5/13/87 Refund Ayers		55.00		
4/6/87 Refund Tephly			65.00	
7/ /87 Check returned by bank			44.00	
9/30/87 Membership Summary	12500.00	121.00	15751.00	0.00
JOURNAL EXPENSES				
Postage/Supplies				
4/17/87 Yeany, JRST Editor	1000.00	1000.00		1000.00
9/30/87 Journal Expense Summary	1000.00	1000.00		0.00
OFFICERS/EXECUTIVE BOARD				
Officers	2400.00			
4/17/87 DeTure President	1000.00	1000.00		
4/17/87 Barufaldi Past Pres.	700.00	700.00		
4/17/87 Blosser Pres. Elect	700.00	700.00		
9/30/87 Officer Summary	2400.00	2400.00		0.00
Spring Executive Board Meeting	950.00			
4/23/87 Breakfast		130.20		
4/23/87 Lunch		367.04		
4/25/87 Dinner		386.88		
4/25/87 Soft Drinks, etc.		33.48		
9/30/87 Spring Board Meeting Summary	950.00	917.60		32.40
Fall Executive Board Meeting	5200.00			
9/30/87 Fall, 1987 Board Summary	5200.00			
9/30/87 OFFICER/EXECUTIVE BOARD SUMMARY	8550.00	3317.60	0.00	5232.40

## ANNUAL MEETINGS

## BUDGET

EXPENDITURE ENCUMBER CATEGORY BUDGET  
BALANCE

## 1987 Convention

	Awards				
	2/10/87	Plaques		143.29	
	3/23/87	Plaque and Gavel		54.34	
	5/29/87	Plaques		63.44	
	6/11/87	Awards, Joslin		48.54	
	7/8/87	Plaque		46.20	
9/30/87	Awards Summary	300.00	355.81	0.00	-55.81
	Speakers				
	4/17/87	Weiss, honorarium		200.00	
	4/17/87	Glass, honorarium		200.00	
	4/29/87	Stevens, travel		343.50	
	5/29/87	Glass, travel		615.00	
	5/29/87	Stevens' benefits req. by U.C.		48.60	
	5/29/87	Stevens, honorarium		200.00	
	5/11/87	Weiss, travel		214.93	
9/30/87	Speaker Summary	3400.00	1822.03	0.00	1577.97
	Programs				
	3/ /87	Type setting programs			1130.00
	6/9/87	Printing programs	924.00		
9/30/87	Program Summary	2600.00	924.00	1130.00	546.00
	Abstracts				
		Printing/distributing abstracts	1000.00		
9/30/87	Abstracts Summary	1300.00	1000.00	0.00	300.00
	(Hilton Hotel Expenses: \$10,174.81)				
	4/24/87	Reception for past presidents		960.00	
	4/24/87	Coffee Break		375.67	
	4/25/87	Coffee Break		379.00	
	4/26/87	Room for local comm.- 2 nights		219.40	
	4/26/87	Awards luncheon		6652.60	
	4/26/87	Yeany's Room 4 nights		308.04	
	4/26/87	Markle's Room 5 nights		362.50	
		Spring Board Meeting - See Above (\$917.60)			
9/30/87	Summary, hotel on-site charges	6500.00	9257.21		-2757.21
	Supplies				
	1/16/87	NSTA Renting Furniture for Booth		200.00	
	3/11/87	NSTA Booth Charge		200.00	
	3/17/87	Rent AV Equipment, Down Payment		140.00	
	5/12/87	Rent AV Equipment, Final Payment		180.00	
	3/26/87	Printing Registration Forms		150.32	
	4/30/87	Printing insert flyers		30.00	
	4/8/87	Badge holders		36.80	
	4/9/87	Shipping materials to Washington		38.00	
	4/9/87	Mailing Expenses, DeTure		45.09	
	4/15/87	Printing on-site reg. forms		153.65	

Convention supplies continued:

		BUDGET	EXPENDITURE	ENCUMB.	CATEGORY BUDGET BALANCE
	4/15/87	Type setting reg forms & bus. crd	115.00		
	4/15/87	Renting printer	89.25		
	4/20/87	Print reception invitations	196.15		
	4/27/87	General supplies	16.94		
	5/1/87	U-Haul Rental to Transport Mater.	103.39		
	5/1/87	Transporting meeting material	99.50		
	5/7/87	NSTA registration to cover booth	64.00		
	5/15/87	Mileage expenses collecting mater	32.34		
	5/18/87	NSTA Booth furniture	88.80		
	6/2/87	NSTA Booth furniture	88.07		
	6/15/87	Nametags, printing	206.98		
	8/14/87	Renting microphones	152.50		
9/30/87	Supply Summary	503.00	2424.78	0.00	-1921.78
	Does not include \$285.03 in cash expenditures during the meeting, of which \$133.37 was reimbursed by Wiley to pay for the new member reception.				
1987 Convention					
	Travel, 87 Meeting				
	4/ /87	Markle, Planning travel	278.00		
	5/1/87	Markle travel expenses	634.33		
	6/23/87	Yeany travel expenses	221.60		
	8/20/87	Butts hotel expenses	505.15		
9/30/87	Travel, '87 Summary	1000.00	1639.08	0.00	-639.08
1988 Convention					
	Travel, 88 Meeting				
	7/14/87	Blosser, travel	484.81		
	8/31/87	Markle, travel	462.75		
9/30/87	Travel '88 Summary	1000.00	947.56		52.44
1989 Convention					
	Travel, 89 Meeting				
	9/4/87	Markle, travel		882.50	
9/30/87	Travel '89 Summary	0.00	0.00	882.50	-882.50
9/30/87	Annual Meeting Summary	16603.00	18370.47	2012.50	-3779.97

EXECUTIVE SECRETARY OFFICE EXPENSES		BUDGET	EXPENDITURES	BALANCE	
Postage					
	1/30/87	January	5.50		
	2/10/87	Bulk mailing	100.00		
	3/31/87	March	61.20		
	3/31/87	Bulk mailing	33.00		
	6/30/87	June	53.63		
	6/30/87	Bulk mailing	33.00		
	8/28/87	Bulk mailing budget at Postoffice	200.00		
9/30/87	Postage Summary	1500.00	486.33	0.00	1013.67
Telephone					
	1/31/87	January	13.76		
	2/28/87	February	4.42		
	3/31/87	March	53.33		
	4/30/87	April	48.77		
	5/31/87	May	18.23		
	6/30/87	June	32.85		
	8/31/87	August	22.16		
9/30/87	Telephone Summary	1800.00	193.52	0.00	1606.48
Supplies/Printing					
	1/22/87	Printing Stationary	86.20		
	1/28/87	Maxi-print software	34.75		
	12/05/86	Printing envelopes	93.55		
	1/21/87	Printing ballots	43.43		
	2/23/87	Printing dues notices	391.35		
	2/23/87	Printing dues envelopes	195.63		
	4/15/87	Printing business cards, Board	190.40		
	4/20/87	File folders for Board	91.00		
	4/21/87	Printing stationary	113.26		
	4/21/87	Print member directories, 50	196.00		
	5/13/87	Business cards, two board members	64.00		
	5/18/87	Letterhead changes, typesetting	14.00		
	7/29/87	Typeset envelopes, plain & bulk	9.70		
	8/12/87	Print envelopes, plain and bulk	212.30		
	5/13/87	Business cards, correct typeset	13.00		
9/30/87	Supplies Summary	1000.00	1748.57	0.00	-748.57
	Miscellaneous	500.00			
9/30/87	Executive Secretary Summary	4800.00	2428.42	0.00	2371.58

RESEARCH MATTERS	BUDGET	EXPENDITURES	ENCUMB.	BALANCE	
3/18/87	Printing Research Matters	360.64			
3/ /87	Typeset new Research Matters				
4/15/87	Printing Research Matters	235.63			
6/3/87	Printing Research Matters	235.63			
8/20/87	Printing Research Matters				
9/30/87	Research Matters Summ.	275.00	831.90	0.00	-556.90

NEWSLETTER		BUDGET	EXPENDENTURE	ENCUM.	BALANCE
	Printing and Postage for four issues				
4/7/87	Type setting, Dec '86		470.00		
1/27/87	Printing, Dec '86 Issue		525.00		
4/20/87	Type setting, March '87		240.00		
4/14/87	Printing, March '87		710.00		
7/6/87	Type setting, June '87		425.00		
6/26/87	Printing, June '87		529.50		
8/ /87	Type setting, Sept. '87			450.00	
8/ /87	Printing, Sept., '87			500.00	
	Type setting, Dec. '87				
	Printing, Dec., '87				
9/30/87	Newsletter Summary	4000.00	2899.50	950.00	150.50

OTHER ITEMS

5/27/87	Triangle Collation	500.00		100.00	400.00
4/9/87	ICASE	60.00	55.00		5.00
9/30/87	Other Summary	560.00	55.00	100.00	405.00

DELTA MONOGRAPH PROJECT	BUDGET	EXPENDITURES	ENCUMB.	CATEGORY BUDGET BALANCE
DELTA Project				
9/30/87	Delta Project Summary	2872.62		2872.62

CATEGORY BUDGET

BOTTOM LINE SUMMARY  
September 30, 1987

	INITIAL BALANCE	BUDGETTED INCOME	RECEIPTS	BUDGETTED EXPENSES	EXPENSES ENCUMBERED	BALANCE
NARST	1688.10	96090.00	107372.93	100638.00	79523.89	18813.50
DELTA	2872.62	0.00	0.00	0.00	0.00	0.00
TOTAL	4560.72	96090.00	107372.93	100638.00	79523.89	18813.50

10723.64  
2872.62  
13596.26

NARST President's Report  
November, 1987

The members of NARST continue to be active in all arenas of science education. As an organization NARST is enjoying a period of good health. Membership is high and we appear to be facing no major crises. The summer, fall portion of my term as president has been interesting and rewarding and certainly less harried than this time as president-elect. Following the 60th annual meeting, Glen and I concluded the business of the 1987 convention.

The activities I have been involved in as the president and representative of NARST include:

1. Office of Technological Assessment -  
Worked with Richard Davies to enlist NARST members to help identify policies that make a difference in improving precollege science education. A survey was mailed to all member
2. Arranged NARST sessions for the 1988 NSTA conference, in St. Louis. The eleven sessions, including those receiving honorable mention for the NARST Practical Application Awards, are attached.
3. Attended the summer board, CAGS meeting of NSTA in Vail, Colorado, July, 1987.
4. Worked with the NSTA affiliate presidents to establish a committee to examine NSTA and affiliate relations.
5. Served on this committee which met in Vail, Colorado and Salt Lake City, Utah to write guidelines for policy. These are to be discussed, revised and approved at the fall board meeting of each affiliate organization. A final draft will be presented at the NSTA board meeting to be held in January in Washington, D.C. The guidelines are in the board book under new business. (Board action requested).
6. Served on NSTA - NSF Study Group to study and analyze the NSF report "Opportunities for Strategic Investment in K-12 Science Education." See attached summary report.
7. Attended NSTA area convention in Salt Lake City. NARST sponsored presentations by Jim Ellis and Dale Baker, Michael Piburn.

8. Served on Program Committee for the NSTA-FAST Area Conference in Miami; was unable to attend due to extenuating circumstances. Dorothy Gable presented for NARST.
9. Began work on the NARST policy Handbook.
10. Appointed a nuclear committee, (Anne Howe, Pat Swift, Lynn Dierking) to examine NARST and classroom teacher relations. The committee will make recommendations for Board Action for the spring meeting.

In addition to these activities, it is time to appoint a search committee for the journal editor to replace Russ Yeany. The new editor needs to work with Russ during 1989. Based on the notes from the last search, the committee was composed of three members: a board member, a non-board member, and a past editor. Board action is needed to approve the appointment of a committee.

It has been my pleasure to serve as your president. I appreciate your continual support.

Submitted by:

Linda R. DeTure

J. Harkness  
Vail, CO  
7/29/87

#### Initial Meeting of NSTA NSF Study Group

Present: Jon Harkness (Chair), Elizabeth Horsch, Mike Padilla, Linda DeTure, Linda Froschauer, Mary Budd Rowe (Ex Officio), LeRoy Lee (Ex Officio)

President Rowe identified the charge as shaping a response by NSTA to SRI's "Opportunities for Strategic Investment in K-12 Science Education: Options for the National Science Foundation." Timeliness was urged to assure impact of the response.

Consensus was reached on desire to pursue Bill Aldridge's suggestion that SRI's Summary Report of the study be published in newsprint format (NSTA Report issue, perhaps) with an appropriate cover introduction and a survey designed to solicit member response to the content of the report, this to be distributed via mail to members of NSTA and affiliated groups by September, 1987 (and perhaps directly at briefings at fall area conventions)

Before leaving Vail, the three major sections of the report will be analyzed and specifications drawn for design of a survey. For this, assignments were:

Problems & Opportunities: DeTure, Padilla  
Core Functions: Froschauer, Lee  
Strategic Investment: Horsch, Harkness

It was intended that specifications for a survey would be given over to proficient staff and/or consultants for design guided by interaction with the study group.

Once designed, it was agreed the survey should be shared with congressional representatives, this to:

1. invite their input, because Congress would be the ultimate target of a report on survey findings, and
2. to alert Congress to our intent to comment on the report.

It was projected that survey data accumulated by staff or consultants could be presented to the study group at the San Antonio Regional Convention and that the group could then render a report to be completed not later than the spring convention.

NARST sponsored sessions for the NSTA National Convention

St. Louis, Missouri  
April 7-10, 1988

THEME: RESEARCH MATTERS TO THE SCIENCE TEACHER

Session 1

"Research Matters: Planning and Teaching for Conceptual Understanding"

Charles W. Anderson  
Teacher Education Dept.  
Michigan State University  
329 Erickson Hall  
E. Lansing, Michigan 48842

Fred Finley  
Curriculum & Instruction Dept.  
University of Minnesota  
Peik Hall  
Minneapolis, Minnesota 55455

Session 2

"Research Matters: Selecting and Using Science Textbooks"

Fred Finley  
Curriculum & Instruction Dept.  
University of Minnesota  
Peik Hall  
Minneapolis, Minnesota 55455

Charles W. Anderson  
Teacher Education Dept.  
Michigan State University  
329 Erickson Hall  
E. Lansing, Michigan 48824

Session 3

"Research Matters...To the Science Teacher: The Role of Manipulative Science Experiences in the Elementary School Classroom"

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

Session 4

"Factors Affecting Student Performance-Implications From Learning and Memory Research"

Marianne Betkouski  
Curriculum & Instruction Dept.  
University of North Florida  
4517 St. Johns Bluff Rd.  
Jacksonville, Florida 32216

Karen Sanchez  
Physical Sciences Dept.  
Florida Community College  
Jacksonville, Florida 32216

Session 5

"Student Knowledge of the Gulf of Maine and Implications  
for Teaching and Curriculum"

Michael J. Brody  
Science Education Dept.  
University of Maine  
206 Shibbs Hall  
Orono, Maine 04469

Helmut Koch  
Science Education Dept.  
University of Maine  
206 Shibbs Hall  
Orono, Maine 04469

Session 6

"Research Matters to the Teacher...Applications from  
Informal Education Research"

Lynn Dierking  
Coordinator  
Howard County Chamber  
5560 Sterrett Place  
Columbia, Maryland 21044

John Falk  
Smithsonian Institute Director  
Community Learning Exchange  
Howard County Chamber  
5560 Sterrett Place  
Columbia, Maryland 21044

Session 7 (30 min.)

"Research Matters to the Science Teacher: Interests of  
Elementary Teachers"

Dorothy Gabel  
Science Education Dept.  
Indiana University/NSF  
1800 G St. NW Rm 419  
Washington, DC 20550

K. V. Samuel  
Bloomington Academic Computing  
Indiana University  
3rd & ByPass  
Bloomington, Indiana 47405

Session 8 (120 min.)

"Secondary School Science Teacher: Classroom Management  
and Exemplary Practices"

James J. Gallagher  
327 Erickson Hall  
Michigan State University  
East Lansing, Michigan 48824

Kenneth Tobin

Session 9

"The Role of Laboratory Activities in the Science  
Curriculum"

Jerry Ivins  
Science Dept.  
Northwest Local Schools  
2762 Johrose Ave.  
Cincinnati, Ohio 45239

Glenn Markle  
Science Education Dept.  
University of Cincinnati  
401 T.C.  
Cincinnati, Ohio 45221

Session 10

"New Video Technologies for Science Instruction"

Robert D. Sherwood  
Learning Technology Center  
Vanderbilt University  
College Box 45, Peabody  
Nashville, Tennessee 37203

Session 11

"Evaluating Secondary Students' Misconceptions of  
Photosynthesis and Respiration in Plants Using a Two  
Tier Diagnostic Instrument"

David Treagust  
Science & Mathematics Education Centre  
Curtin University of Technology  
Kent Street, Bentley  
Perth, Western Australia 6102

**NSTA GUIDELINES FOR AFFILIATION**

Sub-committee Report  
January 16, 1988

Developed and Submitted by: NSTA-Affiliate Guidelines sub-committee  
Linda Froschauer: Chair  
Linda DeTure  
William Frase  
David Kennedy  
William Kyle Jr.  
David Lopath  
Gary Nakagiri  
Kenneth Russell Roy  
Joyce Swartney  
LaMoine Motz, ex-officio

## NSTA GUIDELINES FOR AFFILIATION

### Rationale

The mission of the National Science Teachers Association is "To promote and advocate science education" (Board of Directors Meeting, Summer 1987). The organizational structure of NSTA serves its membership through the policies and activities of the Board of Directors (Presidents, Division Directors, District Directors, and Affiliate Groups).

The role of the Affiliate Groups is to represent professionals from throughout the United States and foreign countries who are practitioners in specific areas of science education. These affiliated groups are able to provide input to NSTA in their specific areas of expertise. Likewise, NSTA is able to provide Affiliates with a broad view of the state of science education and specific direction that might be taken by the individual Affiliate. The specific areas of expertise of Affiliates and general overview of NSTA serve to interface well and provide a solid base for decision making and action.

Thus, NSTA and Affiliates are able to enhance one another's efforts to promote and advocate science education and serve in mutually beneficial roles.

All organizations that are now affiliated with NSTA must adhere to all regulations indicated with the exception of "Procedure for Affiliation" section.

## I. Affiliation

### A. Requirements

An organization may become affiliated with NSTA if it:

1. demonstrates a philosophy that is aligned with that of the NSTA including, but not limited to, a dedication to promoting quality science education.
2. has a demonstrated association with science education at the national or international level.
3. has a constitution and/or by-laws stating its purpose, which is not in conflict with the constitution and by-laws of NSTA and includes a disbanment clause.
4. has elected officers.
5. by majority vote, approves a motion for affiliation with NSTA and endorses NSTA's policies and by-laws.
6. is a not-for-profit organization.
7. is in agreement that both parties are to be signators of an agreement of protective exclusion (see Appendix I).

## B. Process

The following procedure must be followed for an organization to become affiliated with NSTA:

1. The President of the group seeking NSTA affiliate status will provide a letter of request to NSTA. Documentation indicating adherence to the "Affiliate Requirements" cited above should be forwarded to the NSTA President.
2. Documentation and letter of intent will be provided for review by a committee appointed by the NSTA President. This committee will meet in a timely manner enabling process to be completed within twelve months of receipt of materials by Executive Director.
3. The NSTA Board of Directors will receive a report of the committee findings at a regularly scheduled meeting. At that time a vote will be taken concerning said affiliation, majority rule.
4. The NSTA President will inform the petitioning organization of the outcome and classification designation. In the case of denial, rationale for the refusal of Affiliate status will be outlined to the petitioning group. A group seeking Affiliation may resubmit after the period of one fiscal year.

C. Types of Affiliation

1. Financial autonomy

- a. Membership rosters are maintained by the Affiliate.
- b. Ancillary services are afforded by special contractual agreement, eg: membership campaigns, grants, special mailings, etc.
- c. May designate an NSTA journal as the official publication of the Affiliate.
- d. May meet in conjunction with NSTA conventions and meetings.

2. Financially linked

- a. Dual memberships, or separate membership opportunities are afforded members of the Affiliate Group with appropriate financial incentives for dual membership.
- b. Proposed membership fee increases/decreases will be submitted for review and response by Affiliate Board prior to being voted upon by NSTA Board of Directors.
- c. Common membership promotions through special mailings will be financed by NSTA.
- d. Financial agreements for common publications and/or journals will be determined cooperatively by NSTA and Affiliate.
- e. All priveleges afforded Type 1 Affiliation are also afforded Type 2.

D. Status change

- 1. Affiliate may change original status-type through application to NSTA Board and subsequent Board approval.

II. Rights and Responsibilities of NSTA

A. President *of ?*

*see from? also? prior?*

1. Represents NSTA on the Affiliate Board of Directors or appoints a representative from the NSTA Board of Directors who has a knowledge and interest in the specific area of concentration of the Affiliate, in accordance with Affiliate by-laws.
2. Fulfills all responsibilities of Affiliate Board Member as identified in by-laws and operating policies of Affiliate.
3. Appoints Affiliate President or representative to appropriate NSTA special interest committee, eg: CESI representative to Preschool- Elementary Committee.
4. Utilizes the expertise of Affiliate members in the business of NSTA, eg: committees, as resource people, as referral group.

B. Organizational

1. Provide Affiliate President or appointee with all rights and privileges of elected NSTA Board members, eg: to include committee appointments, possible membership on executive committee, financial assistance, and special recognitions.
2. Promote membership in Affiliate Groups, Affiliate publications, convention sessions, Affiliate Awards and recognition programs, and other activities as deemed appropriate and essential by officers of NSTA and Affiliates
3. Provide a minimum of two hours of presentation time at each of the four regional conventions and ten hours of presentation time at the national convention for Affiliate sessions.

4. Provide meeting time and room for Affiliate Boards to meet during or adjacent to NSTA National Convention and one Regional Convention, as specified by Affiliate. The Affiliate Board will meet at any time not in conflict with that of NSTA committees.
5. Provide meeting time for Affiliate Presidents' Board during NSTA National Convention and summer Board of Directors Meeting.
6. Provide copy of documents that are directed toward special interest groups to Affiliates for review/input prior to vote by NSTA Board of Directors, eg: position statements.
7. Appoint an NSTA staff member as Affiliate liaison.

### III. Rights and Responsibilities of Affiliates

#### A. President

1. Represents the Affiliate Group on the NSTA Board of Directors or appoints a representative from the Affiliate Board of Directors.
2. Fulfills all responsibilities of Affiliate President as identified in the NSTA Operating Policies.
3. Serves on the Affiliate Presidents' Board (see Appendix II).
4. Must be a member, in good standing, of NSTA.

#### B. Organizational

1. Provide NSTA President or appointee with all rights and privileges of elected Affiliate Board members - to include committee appointments, financial assistance, and special recognitions.
2. Promote membership in NSTA, NSTA Regional and National Conventions, NSTA publications, NSTA Awards and recognition programs, NSTA special programs such as teacher certification and SESE, and other activities as deemed appropriate and essential by officers of NSTA and Affiliates.
3. May identify one of the NSTA journals as its official journal, in which case a representative from the Affiliate will be appointed to the Advisory Board of that journal.
4. May present awards that are separate from NSTA Awards.
5. Inform NSTA of all newly elected Officers and Board Members in a timely manner.
6. Inform NSTA of any changes in Constitution or by-laws in a timely manner.
7. Provide NSTA with active membership list when requested, for internal use only.
8. Inform NSTA of all conferences, seminars, etc. that are being conducted by or in conjunction with the Affiliate where science education concerns are being addressed.

#### IV. Disaffiliation

##### A. Written notice by initiating organization

1. An Affiliate Organization may disaffiliate from NSTA at any time by submitting a letter to the NSTA President citing the Affiliates' Board action to initiate disaffiliation and the reasons for this request.

a. A Type 1 organization must submit such written notice at least 60 days prior to an NSTA Board Meeting.

b. A Type 2 organization must submit such written notice at least 6 months prior to an NSTA Board Meeting.

2. NSTA may move to conclude an affiliation relationship by submitting a letter from the NSTA President to the Affiliate President citing related NSTA Board action to initiate disaffiliation and the reasons for this request. It is agreed that specific contractual or fiscal agreements must be handled separately from these proceedings.

a. NSTA must submit such written notice at least 60 days prior to effective date to Type 1 Affiliate organization.

b. NSTA must submit written notice at least six months prior to effective date to Type 2 organization.

##### B. Meeting between NSTA and Affiliate

1. A meeting will be held between the President of the Affiliate and the NSTA President. Other supporting members or personnel may be in attendance. This meeting will be held within three months of disaffiliation notice to (1) treat considerations of both the terminating and ongoing relationship, (2) discuss major issues of conflict, (3) seek resolution of conflicting issues, and (4) seek continuation of affiliation if possible.

##### C. Board action

1. The NSTA Board must act on any disaffiliation request and on the resolution of any related business issues in order to confirm and effect disaffiliation.

2. The Board of Directors of the disaffiliating organization must confirm such disaffiliation, and accomdate for this action in their bylaws and records.

## APPENDIX I

### PROTECTIVE EXCLUSION

In this affiliation between the NSTA and \_\_\_\_\_,  
organization  
both parties mutually agree to hold the other party harmless in the  
event of litigation against either organization where in the other  
party is not named.

## APPENDIX II

### AFFILIATE PRESIDENTS' BOARD GUIDELINES

1. The purpose of the Affiliate Presidents' Board is to help support the efforts of NSTA and its Affiliates, provide a communication link between members of Affiliated groups, and generate projects to be cooperative efforts of appropriate Affiliates and NSTA.
2. The Board will meet two times a year. (1) A breakfast meeting to be held at the time of the NSTA National Convention, to be paid for by Affiliate of Chair. Affiliate Presidents and Presidents-elect are asked to attend this meeting. (2) During the NSTA Summer Board Meeting.
3. The Board is made up of Presidents of NSTA Affiliate Groups.
- 4.. Chair is determined through alphabetical order and serves from the conclusion of NSTA National Convention in one year through the end of NSTA National Convention the following year , eg:

AETS	1986-87
CESI	1987-88
CSSS	1988-89
NARST	1989-90
NSSA	1990-91
SCST	1991-92.

Any President of a new Affiliate of NSTA will be placed within this alphabetical order but will not serve as Chair if their rotation is within two years of Affiliation.

## NSTA POLICY-Suggestions 1/16/88

### RESPONSIBILITIES AND DUTIES OF AFFILIATE PRESIDENTS SERVING ON THE NSTA BOARD

The Affiliate President is the official representative of an affiliated group and promotes the NSTA objectives, programs, and membership within the affiliated group. The Affiliate also serves as the sounding board for his affiliate group and communicates their views and projects to NSTA.

#### Duties of the Affiliate Presidents:

1. Serve on the Board of Directors and attend Board of Director meetings as called by the President of NSTA. Presence at NSTA Board meetings will be financially supported in the same amount and manner as all other NSTA Board members. To be an effective Board member, the Affiliate President must be fully cognizant of the NSTA Bylaws and Operating Policies. These will be made available upon joining the Board. He should review all financial reports that are provided by the Executive Director and/or Comptroller of NSTA. Minutes of the Board of Directors Meetings and Executive Board Meetings supplied by the Executive Director should be reviewed.
2. Serve as a member of the NSTA Member Services and Chapters and Associated Groups Committee and any other committees designated by the President of NSTA.
3. Attend NSTA National Conventions and Area Conventions when possible. Be visible to the NSTA membership.
  - a. Assist at NSTA Membership Booth at conventions. Contact Director of Member Services to arrange schedule.
  - b. Attend meetings of committees to which appointed and any other committee meeting in area of interest.
4. Promote NSTA membership through the distribution of materials whenever possible. Special promotions should be provided through Affiliate publications, promotions, and meetings.
5. Encourage Affiliate members to nominate fellow professional for NSTA awards, NSTA Offices, and Board of Directors.
6. Submit to the President of NSTA quarterly reports concerning activities of Affiliate.
7. Provide President-Elect with names of members who are qualified to serve on NSTA committees.
8. Serve as the liaison between NSTA and Affiliated Group.

### Additional considerations

In addition to the afore mentioned guidelines, this committee feels that the following items should be taken under consideration by NSTA and Affiliates.

1. Consideration of policy requiring membership in NSTA or Affiliate group for authorship on NSTA publication, unless special publication is specifically solicited.
2. Development of joint NSTA-Affiliate awards in specific areas.
3. Development of cooperative grant proposals.
4. Two year Presidencies for all Affiliates and NSTA.
5. Rewrite of NSTA Policy concerning responsibilities of Directors.

Donald C. Swain  
President

University of Louisville  
Louisville, Kentucky 40292  
(502) 585-5420

# UNIVERSITY of LOUISVILLE

September 21, 1987

Bill D. Aldridge  
Executive Director  
NSTA  
1742 Connecticut Ave., N.W.  
Washington, DC 20009

Dear Mr. Aldridge:

The University of Louisville recently announced the establishment of the University of Louisville Grawemeyer Award in Education. This award, which includes an annual prize of \$150,000, is intended to recognize outstanding ideas in education, ideas that have the potential to produce significant improvements in educational practice or attainment. The attached material explains the purpose of the award and delineates the procedure by which the award winner will be selected.

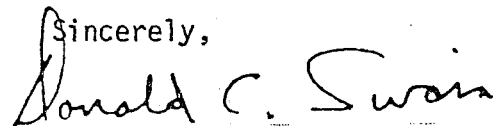
Some time ago, I asked the Dean and faculty of the School of Education to propose approximately 150 educational leaders and scholars throughout the world to be invited to make nominations. Your name is on this select list of proposed nominators.

I am writing to ask you to nominate the educational ideas (and the individuals or groups who proposed them) that you consider most deserving of the award. With your valuable assistance, we can assure that the ideas considered are of the very highest quality and significance. All nominees submitted by the nominators will receive careful consideration.

In the future, we hope the University of Louisville Grawemeyer Award will be recognized as the equivalent of a Nobel Prize in education. Your help is essential if we are to make this hope a reality. I look forward to hearing from you.

With best wishes.

Sincerely,



DCS/mkt

Attachments

3797v

# Stawemeyer Award in Education UNIVERSITY OF LOUISVILLE

## Purpose

The purpose of the award is to stimulate the dissemination, public scrutiny, and implementation of ideas that have potential to bring about significant improvement in educational practice and advances in educational attainment. The competition is open to ideas, policy proposals, technological advances, and program initiatives as well as research reports. The award is designed to stimulate thought and educational improvement from a worldwide perspective. It is intended not only to reward the individuals responsible but to draw attention to their ideas, proposals, or achievements by subjecting them to the scrutiny of a wider range of critics through substantial publicity.



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# The University

The University of Louisville School of Education is pleased to announce the first annual competition for the best set of ideas or other achievement with potential for constructive impact in education in the United States or elsewhere throughout the world presented in the last five years, 1983-1987. The university is able to provide the award as a result of

the creative generosity of Mr. H. Charles Grawemeyer. The ideas deemed most useful and well articulated may have an individual author or authors, or may be the product of an institution or agency, and the ideas may emanate from anywhere in the world. The award will be one hundred fifty thousand dollars (\$150,000).

## Administration

1. The University invites nominations from throughout the world by professional educators, by educational institutions and organizations, and by editors and publishers of journals and books. Self nominations will not be accepted or considered. Each of the nominations must be received by the University on or before January 30 from among ideas or achievements published in the preceding five calendar years.
2. Each nomination must be submitted in three clear copies. Submissions in a language other than English must be accompanied by competent English translations. The nominator will set out briefly the significance of the nomination and why it is presumed worthy of the award. The submission will include a complete description of the idea or achievement, the date and format of its publication, and a description of the author(s). Publication will be considered to be not only printed books and articles in scholarly or distinguished journals but public speeches, "white papers," or other widely and publicly disseminated forms so long as they first appeared in the eligible time frame.
3. The President of the University will appoint, upon the recommendation of the Dean of the School of Education, a distinguished international panel of three jurors who will recommend three finalists to the University of Louisville Grawemeyer Award in Education Committee. This committee, consisting of the President of the University, the Dean of the School of Education, and four persons named by the president, will select the winning submission for the award. The Board of Trustees of the University will grant the award upon the recommendation of this committee.
4. Acceptance of the award will require personal delivery of a public address setting out the winning concept or ideas at the University of Louisville.
5. Each entry must be submitted in three typed or printed copies and these submissions shall include:
  - a. The idea as published (in the case of a speech, the written text or transcript) including all standard bibliographic citations and copyright citations.
  - b. A letter of nomination setting out the reasons perceived by the nominators for the idea to merit the award and stating accurately the nominator's relation to the author(s). Published reviews of the nominated material will also be welcomed.
  - c. Biographical and descriptive materials of the author(s) of the idea (the group or institution, when it is the product of more than one or a small set of authors).
  - d. A completed entry form.
  - e. Acknowledgement that one copy of all materials submitted will become a part of the permanent university archives.
6. All nominations must reach the University of Louisville by January 30, 1988.
7. Nominations and requests for entry forms or further information should be sent to:

University of Louisville  
Grawemeyer Award in Education  
School of Education, Dean's Office  
University of Louisville  
Louisville, KY 40292  
U.S.A.
8. The winner of the University of Louisville Grawemeyer Award in Education will be publicly announced in the Spring of 1988. The public presentation by its author(s) will take place at the University later in 1988, the time and place to be set by the University.
9. The prize will be paid in five annual installments of thirty thousand dollars (\$30,000.00).

UNIVERSITY of LOUISVILLE  
**Grawemeyer Award**  
in Education 1988

Nomination  
Form

Title of Idea (as published)

Date, Place and Format of First Publication

Author(s)

Address

Phone Number

Name, address, phone number and position of nominator for this entry

Please submit a supporting letter in English setting out reasons why this idea merits the award. Published reviews of the work will also be welcomed.

The University will contact the nominee(s) at the address provided to obtain copies of the work, a nominee form, and biography which the nominee must submit prior to final review. All materials submitted become the property of the University of Louisville.

Agreed to:

Nominator

Date

No nomination will be accepted without this form and all required documentation. All materials must be received at the University on or before January 30, 1988. Nominations should be sent to:

University of Louisville  
Grawemeyer Award in Education  
School of Education  
University of Louisville  
Louisville, KY 40292  
U.S.A.





College of Education  
Department of Educational  
Theory and Practice  
Science and Mathematics

249 Arps Hall  
1945 North High Street  
Columbus, OH 43210-1172  
Phone 614-292-4121

October 5, 1987

David P. Butts  
Nat'l Assn Research Sci  
University of Georgia  
Athens, GA 30602

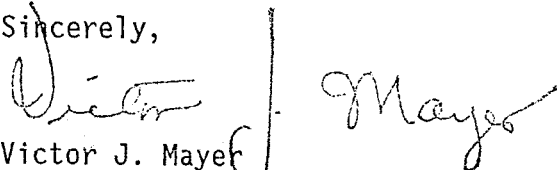
Dear Colleague:

It is time to begin thinking about the 1989 meeting in San Francisco. I will be responsible for coordinating Section Q (Education) contributions to the program. Please think about possible topics and presenters for symposia. I would appreciate getting your ideas as soon as possible so that we have sufficient time to develop quality proposals. They need to be submitted early in 1988.

I will be at the following address until Christmas, when I will be returning to Columbus:

American Geological Institute  
4220 King Street  
Alexandria, VA 22302  
Phone: (703) 379-2480

Sincerely,

  
Victor J. Mayer  
Chair-Elect, Section Q, AAAS

Rodger,

I've set aside a room & time for  
a concurrent session at NARST  
next April for NARST members to  
talk with the Research Coordinator.

Do you want to develop an abstract  
that is ready an announcement so  
that you could air some of this  
with the members?

Pat

WR

---

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

---

October 9, 1987

IMMEDIATE PAST PRESIDENT

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

---

Dear Pat:

It was good to talk to you as always. As noted in Glen's letter of July 12, the fall board meeting will be held Thursday, November 5 at the William Penn Weston Hotel in Pittsburg, PA. Our meeting is scheduled in the Churchill Room with the continental breakfast being served next door in the Sewickley Room. Don't forget to make room reservations.

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

---

*P.A.M.*

I know what a busy time this is for you especially when you don't have good support or help. If you are able to get me your Program Committee report by October 21, I will have time to include it in the board book to be mailed out prior to the meeting.

I hope that you are doing well. You certainly have my support. If I may be of assistance, please let me know. I look forward to seeing you soon.

Sincerely,



Linda R. DeTure  
President

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

---

NARST-NEWS EDITOR

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

**TEC** Technical  
Education  
Research  
Centers

1696 Massachusetts Avenue  
Cambridge, Massachusetts 02138

Telephone 617-547-0430  
617-547-3890

October 28, 1987

Ms. Patricia E. Blosser  
ERIC-SMEAC  
1200 Chambers Rd., Rm. 310  
Columbus, OH 43212

Dear Patricia:

Thank you for your kind offer to speak at the NARST meeting April 11. I would like to talk about "A Partnership Between Research and Technologically Driven Development." This will give me a chance to talk about some important missed opportunities that I see owing to the relative divorce of educational research on the one hand and educational development that's driven by technology on the other. Technology opens new possibilities for learning and consequently creates some ripe research areas which very much need investigation. I will use some examples from our Microcomputer-Based Labs and associated research in graphing, as well as some developments on the KIDNET project which I think will lead to some important new areas of research in data interpretation.

Thanks again for your invitation.

Sincerely,



Robert F. Tinker

RFT/vab

---

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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1742 Connecticut Avenue N.E.  
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Dr. John Staver (1988)  
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Athens, GA 30602

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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

To: NARST Executive Board

From: Linda R. DeTure

RE: Board Book

Date: October 27, 1987

Please find enclosed the fall board book for next week's meeting. If you are planning to bring your report to the meeting with you, would you punch it for a three ring binder? Jim included the c.v's of the nominees for next years board with the election committees report. Because it such a thich packet, you may want to remove it after reading to make room for additional reports.

The NSTA Affiliates have been working to produce guidelines for NSTA-Affiliate relations. The document we developed in Salt Lake City is included under new business. If possible could you read it before the board meeting on Thursday? It will require board action. Thanks.

I look forward to seeing you soon. Best regards.



Report of the  
NARST Financial Advisory Committee Meeting  
to the NARST Board of Directors

November 5, 1987

The Financial Advisory Committee (FAC) met by long distance conference call on October 21, 1987 to carry out its charge to consider the proposed annual budget, approve program expenses, approve publication costs and new ventures, offer advice and recommendations to the Board regarding all financial affairs of the Association, and conduct an annual audit of the financial accounts of the Association. Discussion in five areas composes the body of this report: 1) A summary of the status of the 1987 budget through September 30; 2) the proposed 1988 budget; 3) life membership in NARST; 4) liability insurance for NARST and its officers and Board members; and 5) the annual audit of NARST financial accounts. The report ends with motions/recommendations of the FAC to the NARST Board.

1. Markle summarized the 1987 budget through September 30. Two issues emerged as central. First, Markle thinks that NARST may still owe Wiley about \$8,000, but he has asked Wiley to check and update the NARST status. Wiley says that we have no outstanding debt, that we are paid to date. The money involves approximately \$8,000 sent by former executive secretary Holliday to Wiley. Wiley returned the check. When the executive secretary's office moved to the University of Cincinnati, the money was transferred there. The saga continues. The second issue

centered upon the \$1700 deficit for the annual meeting. We must make the annual meeting operate at the break even point or possibly profit somewhat. Other items discussed were: 1) membership is up about 15%; 2) Markle is continuing his efforts to recruit new members. 3) Negotiations have begun with Wiley on the new JRST contract. The FAC commended Markle for a job well done.

2. Markle summarized the proposed 1988 budget. A lengthy discussion commenced with respect to several aspects of the budget. A) Markle has reduced expenditures associated with his office in accordance with past levels of expenditure. However, if circumstances change, expenditures could increase. B) The annual meeting is projected to operate at a loss. Should NARST increase the registration fee? C) The newsletter is an expensive item, but it provides an important service; we should maintain it at the present level. D) It seems that NARST pays a large sum to exhibit at NSTA. <sup>\$200</sup> Can all or part of this cost be waived? E) NARST should not increase cost of attending the workshops because graduate students and recent Ph.D.s make up much of the audience.
3. Life membership in NARST was discussed briefly. Staver reported to the committee that it was not feasible. The committee unanimously recommended that no further consideration be given to a life membership category.
4. The question of liability insurance was discussed. A \$1,000,000 policy covering this organization as well as individual officers and board members, with a \$2,500 deductible, could cost as much as \$3,000 per year. Holliday suggested that each officer and board member check on such

coverage through a "professional rider" to his/her homeowners insurance. Moreover, as a protective measure, the committee directed Markle to contact an attorney in order to obtain recommendations about NARST obligations and possible disclaimer language to be printed in the program.

5. The committee discussed the financial report of Louis Fisher, fiscal officer at the University of Cincinnati. Mr. Fisher certifies that the expenditures summarized in his report were paid and that vouchers are available for audit purposes. The committee accepted the report and recommends unanimously that the NARST Board accept it.

#### Motions/Recommendations

- A. Increase advance registration fee from \$35 to \$50, and on-site registration fee from \$45 to \$60 effective with the 1988 meeting. Passed unanimously.
- B. Accept and recommend proposed budget with modifications above to the NARST board. Passed unanimously.
- C. Directed Markle to contact Bill Aldridge, NSTA executive secretary, to negotiate the cost of the NARST booth at the NSTA convention.
- D. Accepted the University of Cincinnati fiscal officer's report of the analysis of the NARST books and recommends that the NARST board accept it.

- E. Recommend that no further consideration be given to a NARST life membership category.
  
- F. Directed Markle to contact an attorney in order to obtain recommendations about NARST obligations and possible disclaimer language to be printed in the program.

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1986

**Annual  
Report**

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Triangle  
Coalition  
for  
Science  
and  
Technology  
Education



*The Triangle Coalition for Science and Technology Education brings together the ideas, influence, and resources of a large number of national organizations for the purpose of improving science and technology education for all students.*

*The triangular symbolism of the Coalition represents the joining together of member organizations from three broad sectors: education... science and engineering... business, industry and labor. The Triangle Coalition draws its strength from the long-term commitment of these diverse constituencies to science education.*

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# 1986

## MAJOR ACTIVITIES

### Local Alliance Network

The Carnegie Corporation of New York is funding the Coalition's two-year effort to identify existing broad-based local action groups—"local alliances"—formed to help revitalize science and technology education. Specific accomplishments during this project's ten months of operation include:

- **Clearinghouse:** Establishment of a computerized database containing information on at least 150 groups.
- **Alliance Promotion:** A mailing of 10,000 local alliance promotional packets containing the brochure, *You've Got a Stake in Science Education\**, and the first issue of *Alliance Network News (ANN)*. Distributed through Triangle Coalition members and other organizations, this material encourages the formation of local alliances and offers assistance to interested groups and individuals.
- **Handbook—How to Form and Operate a Local Alliance.\*** Over 2500 of these "how-to" handbooks drawing upon advice and case studies offered by the network's local alliances were produced and distributed free on request.
- **Alliance Network News (ANN):** Production and circulation of a quarterly newsletter to existing alliances and 1000 other contacts. *ANN* features summaries of existing alliance activities and news of reports and conferences of interest to alliance participants.
- **Regional Conference:** The first of six regional conferences on forming and operating alliances was held in Phoenix, Arizona, in December. Sixty participants from seven southwestern states met in a workshop format to develop plans and activities for establishing new alliances.
- **Consultant Service:** Initiation of a program to provide support and expertise by matching experienced alliance leaders with newly-forming groups.

*\*Produced with NSF funding*

### Elementary Science Education

The Triangle Coalition held a national conference on elementary education, "The Importance of an Early Start for Science Education," at the Spring Hill Conference Center near Minneapolis for three days in July, 1986.

Funded by the Carnegie Corporation of New York, the conference attracted over 80 participants and produced a statement which reads, in part: "Science must join language and mathematics as a basic from the beginning of every child's school experience. A high quality elementary science experience contributes to a child's intellectual development and to the growth of an understanding of technology and the natural world which is necessary for a productive, satisfying life."

### National Science Week

Begun by the National Science Foundation in 1985 and supported by a Congressional Resolution, National Science Week is intended to "increase public awareness and understanding of science." As a sponsoring organization, the Triangle Coalition was an active 1986 participant.

- **National Balloon Launch:** With support from Worldbook-Childcraft, the National Science Foundation, and Triangle Coalition members DuPont, the Federation of American Societies for Experimental Biology, and the American Geological Institute, the Triangle Coalition sponsored a national balloon launch on May 12. At the same moment nationwide, 200,000 students at 800 school launch sites released helium-filled balloons tagged with prepaid return cards. Over 8,000 cards were retrieved, analyzed, and re-

turned to their launch sites with winds aloft data, maps, and suggestions for follow-up classroom activities.

- **NSW '86 Elementary Science Packets:** The Triangle Coalition obtained NSF funding and coordinated the development and distribution of 20,000 activity kits for elementary teachers produced by the Colorado-based Biological Sciences Curriculum Study (BSCS).

### Outreach

With the exchange of ideas and information as a key mission for the Triangle Coalition, in 1986 we explored a number of avenues to get information out to both our general membership and the public at large.

- **Electronic Bulletin Board:** This service makes new information and opportunities available to all Triangle Coalition members due to the generosity of the American Association of Physics Teachers. Its major purpose is to give member organizations a mechanism for telling each other about new programs.
- **National promotion:** Triangle Coalition activities were featured in several magazines—*ProEducation*, *Geotimes*, *Education Week*, and *Physics Today* to name a few—that speak to scientists, educators, and the general public. And the Coalition's voice was heard at several national conferences debating elementary science education and science education reform.

# 1987 PLANS AND ACTIVITIES

During 1987 the Triangle Coalition will continue to promote the formation of local alliances, to develop the Alliance Clearinghouse, and to expand the circulation and coverage of *Alliance Network News*. Other projects include:

• **Regional Conferences:** Co-sponsored by the Atlanta Partnership of Business and Education, Inc. and the BellSouth Corporation, the second regional conference on local alliances was held in Atlanta, Georgia April 30 - May 1. A midwest regional conference, hosted by the Corridor Partnership for Excellence in Education and Amoco Corporation, was held in Chicago this May. A regional conference is planned for the fall of 1987 in conjunction with the Philadelphia Renaissance in Science and Mathematics. Planning is also underway for a regional conference in association with the NSTA Area Convention in San Antonio, Texas, in November.

• **National Conference:** Plans are developing for a national conference of local alliance leaders

As follow-up to the 1986 elementary conference, we are seeking support to develop a "local action packet" of handbooks, "how-to" materials, and self-assessment guidelines to distribute in the Fall of 1988. The Spring Hill Conference statement is being prepared for distribution as a brochure.

On April 6, the Triangle Coalition National Balloon Launch was the opening event of National Science and Technology Week, '87. Two hundred and twenty-five thousand balloons were launched from over 500 schools and twelve thousand cards have been returned to students and teachers along with useful scientific data and suggested classroom activities. Again, the return cards were generously donated by the Federation of American Societies for Experimental Biology and analyzed by the American Geological Institute.

The 1987 National Balloon Launch in Washington was co-sponsored by the National Science Foundation, the National Science Teachers Association, the American Chemical Society, and the National Academy of Sciences. Before the launch, Triangle Coalition leaders joined with public policy makers at the National Academy of Sciences for a discussion on "Four Years of Reform in Science Education."

The National Balloon Launch began as a local alliance activity but has become so popular that schools are now the major participants. A high visibility event for the Triangle Coalition that attracts extensive media coverage, the National Balloon Launch is nonetheless most successful as a simultaneous, nationwide, student-run science activity.

Continuing change in the environment for science and technology education and continued growth in the Triangle Coalition's membership and channels of communication present the Triangle with a stream of new opportunities.

• **Triangle Coalition News:** A newsletter to address Triangle Coalition efforts to unite science, math, and technology education interests will begin in 1987. A task force of the Triangle Coalition Steering Committee has been charged with the responsibility of planning this publication.

• **Kidnet:** The Triangle Coalition is a cooperating member in the "Kids Network" project which the Technical Education Research Centers and the National Geographic Society (both Coalition members) are getting underway with National Science Foundation funding.

and Triangle Coalition organizational representatives to examine local and national progress and needs in the reform of science education.

• **Directory for Local Alliances:** A listing of local contacts available through the Triangle Coalition member organizations is planned as a supplement to the local alliance handbook.

• **Database of Teacher Assistance Programs:** under the Carnegie grant, the Triangle Coalition will produce a database of national programs which offer science teachers some kind of direct assistance such as minigrants, summer internships, equipment loans or gifts, technical help, and speaker's bureaus.

• **Rural Alliances:** The Triangle Coalition has begun discussions concerning the special problems of alliances in sparsely populated areas. A planning committee will look toward a conference on this topic in 1988.

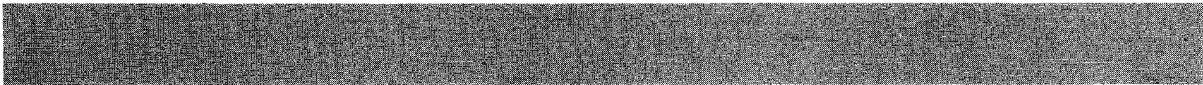
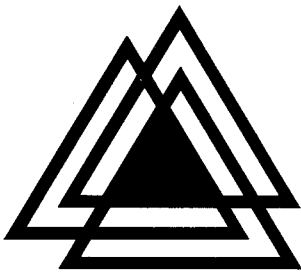
• **Summer Internships for Teachers:** The Triangle Coalition has had several discussions with representatives of Industry Initiatives for Science and Math Education (IISME) about expanding their exemplary teacher-summer internships program. A meeting of IISME, the Triangle Coalition, and other organizations is planned for 1987.

**Local  
Alliance  
Network**

**Elementary  
Science  
Education**

**National  
Balloon  
Launch**

**New  
Directions**



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## The Triangle Coalition for Science and Technology Education

and its member organizations work together and with teachers to collect, organize, and disseminate information on problems in and assistance for science education.

The Triangle Coalition occasionally identifies a need to which it responds with a program guided by an ad hoc task force. Active task forces include: elementary science education; local alliances for science and technology education; educational technology; National Science Week/National Balloon Launch; congressional liaison; and public information and outreach.

Established in April 1985, the Triangle Coalition is now entering its third year of operation. The Coalition is directed by Dr. John M. Fowler and operates through a small staff, located at the National Science Teachers Association's (NSTA) Special Projects Office in College Park, Maryland. The NSTA, a 501(c)3, non-profit organization, serves as the Triangle Coalition's fiscal agent.

### Chairpersons

#### Education

Mary Hatwood Futrell  
National Education Association

#### Business and Industry

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

#### Science and Engineering

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University of California-Berkely

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Federation of American Societies  
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General Electric Company

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SUNY-Stony Brook

Walter Purdy  
Edison Electric Institute

Gerald Skoog  
National Science Teachers  
Association

Jack Wilson  
American Association of  
Physics Teachers

### Director

John M. Fowler  
Triangle Coalition for Science and  
Technology Education  
c/o NSTA Special Projects  
5112 Berwyn Road, 3rd Floor  
College Park, Maryland 20740  
(301) 220-0872

## Membership and Finances

The Triangle Coalition grew by 15 members, to a total of 48 by the end of 1986. Total membership by May 1, 1987 was 55. A list of current member organizations is available from the Triangle Coalition office.

The core operations of the Triangle Coalition—staff and office, task force and steering committee meetings—are supported by scaled assessments on member organizations. Specific projects are supported by external grants and contributions.

With a core budget of \$78,900 in 1986, external project funds totalling \$216,200 were obtained and administered.

A complete breakout of 1986 income and expenses, along with a projected budget for 1987 is available from the Triangle Coalition office.

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EXECUTIVE SECRETARY

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

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# NARST

NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

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PRESIDENT

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

October 19, 1987

---

PRESIDENT-ELECT

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

TO: NARST Officers and Board Members

FROM: John R. Staver, Chairperson  
JRST Award Committee

---

IMMEDIATE PAST PRESIDENT

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

RE: Committee Action Since Spring Board Meeting, 1987

---

BOARD MEMBERS-AT-LARGE

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

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

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

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

LeRoy Lee  
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

The JRST Award Committee members performed a periodic checkup and revision of the JRST Award criteria and rating sheet. The documents pertaining to the process and its results are contained in attachment #1.

JRST Award Committee members are presently engaged in the evaluation of articles in the current volume of JRST. This is proceeding smoothly. Round #1 evaluations are due in my hands by January 8, 1988. Hopefully, the JRST Award winner will be selected by mid February. Documents pertaining to the selection process are contained in attachment #2.

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JOURNAL EDITOR

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

---

RESEARCH COORDINATOR

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

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  
Teacher Education  
Lewis and Clark College  
Portland, Oregon 97219

Dr. Charles R. Barman  
School of Education  
Indiana University  
902 West New York Street  
Indianapolis, IN 46223

Dr. Ronald J. Bonnstetter  
211 A Henzlik Hall  
University of Nebraska  
Lincoln, NE 68588

Dr. Julia Clark  
Curriculum and Instruction  
Texas A & M University  
College Station, TX 77843

Dr. Donald R. Daus  
Dept. of Elementary Education  
UMC 2805  
Utah State University  
Logan, Utah 84322

Dr. Richard A. Duschl  
Box 1246  
Hunter College  
695 Park Ave.  
New York, NY 10021

Dr. James J. Gallagher  
327 Erickson Hall  
Michigan State University  
East Lansing, MI 48824

Dr. Mary Lou Koran  
Rt. 4, Box 432  
Alachua, FL 32615

Dr. Frances Lawrenz  
Dept. of Curriculum and Instruction  
159 Pillsbury Dr. S.E.  
University of Minnesota  
Minneapolis, MN 55455

Dr. Edmund A. Marek  
Physical Science Building, Room 323  
University of Oklahoma  
Norman, OK 73019

Dr. Earl J. Montague  
Science Education Center EDB 340  
The University of Texas at Austin  
Austin, TX 78712

Dr. Pat Obenauf  
P.O. Box 6122  
604-P Allen Hall  
West Virginia University  
Morgantown, West Virginia 26506

Dr. Joseph P. Riley  
Department of Science Education  
212 Aderhold Hall  
The University of Georgia  
Athens, GA 30602

Dr. Julie P. Sanford  
Science Teaching Center  
The University of Maryland  
College Park, MD 20742

Dr. Piyush Swami  
College of Education  
University of Cincinnati  
Cincinnati, OH 45221

Dr. Kenneth G. Tobin  
Science Education  
Florida State University  
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Dr. Kevin C. Wise  
Curriculum and Instruction  
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Carbondale, IL 62901

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NARST  
University of Cincinnati  
Cincinnati, OH 45221-0002

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# NARST

NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

PRESIDENT

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

April 30, 1987

#1

TO: JRST Award Committee Members

FROM: John R. Staver, Chairperson



RE: Review of article rating instrument

PRESIDENT-ELECT

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

IMMEDIATE PAST PRESIDENT

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

In our committee meeting on Friday, April 24, the issue of improving the JRST article rating instrument was discussed. Let me hasten to note that no one expressed deep dissatisfaction with the instrument. Rather, the sentiment was that we should give it a "periodic checkup", similar to periodic car maintenance.

BOARD MEMBERS-AT-LARGE

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

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

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

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

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

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

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

Please find enclosed a copy of the instrument used to rate JRST articles. As you review the instrument, keep these questions in mind. Are the items well defined? Should the definitions be revised? Are replacement or additional items needed? Is this instrument fair to the different kinds of articles appearing in JRST? You are free to make any suggestions that you wish. Please make them specific and in writing so that I can modify the instrument. Return all suggestions to me by June 5, 1987 at the address below:

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

On the enclosed 3 x 5 note card please type your complete academic address including zip code, office phone number, secretarial/department phone number, and home phone number.

JOURNAL EDITOR

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

In early July I will contact you by mail to issue you the reading assignments (no more than two issues for round 1). Best wishes for a good summer.

RESEARCH COORDINATOR

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

---

**EXECUTIVE SECRETARY**

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

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# NARST

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**PRESIDENT**

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

July 10, 1987



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**PRESIDENT-ELECT**

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

---

**IMMEDIATE PAST PRESIDENT**

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

Dear

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**BOARD MEMBERS-AT-LARGE**

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

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Education Department  
Mills College  
Oakland, CA 94613

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Science Education  
Florida State University  
Tallahassee, FL 32306

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Science Education Department  
University of Georgia  
Athens, GA 30602

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

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

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

---

**JOURNAL EDITOR**

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

---

**RESEARCH COORDINATOR**

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

Please find enclosed several documents that pertain to your activities on the JRST Award Committee. As you know, the JRST Award Committee is charged to select the best article in each volume of the Journal of Research in Science Teaching. As committee members it is our responsibility to carry out this task for Volume 24. Most members have been assigned two (2) entire issues of the Journal to review in the first round. Your assignment appears on an enclosure. Also enclosed is a page entitled "Criteria and Instructions...." Please read and rate each article in your issues using the criteria and the scale. Mark your ratings on the enclosed evaluation forms.

Please return to me your completed ratings for each issue as soon as you have finished. In any case, your ratings should be in my possession no later than January 8, 1988, even for those assigned issues 8 or 9. When all first round ratings are received, I will tabulate them and determine the first round choices. The top rated article within each issue will be forwarded to the final round. In mid January I will send you the list of first round choices and a new batch of rating sheets. You will then have about 2-3 weeks to read and rate the nine finalists and return your completed ratings to me. I will then tabulate them to determine which paper you have selected as the JRST Award winner, the article which in your judgement has made the most significant contribution to the Journal in Volume 24.

In accordance with policy, you should not rate your own articles. If I have assigned you an issue in which you have authored or co-authored an article, please inform me immediately. I will switch your assignment with another rater.

---

**EXECUTIVE SECRETARY**

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

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PAGE 2

NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

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

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**PRESIDENT-ELECT**

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

---

**IMMEDIATE PAST PRESIDENT**

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

---

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

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Tallahassee, FL 32306

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University of Georgia  
Athens, GA 30602

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University of Illinois at Chicago  
Chicago, IL 60680

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Dept. of Curriculum and Instruction  
Kansas State University  
Manhattan, KS 66506

---

**JOURNAL EDITOR**

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

---

**RESEARCH COORDINATOR**

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

At this point I want to digress a bit to inform you about the results of the "periodic checkup" on the rating system for the JRST Award. First, thanks to each person who took the time to make comments and suggestions. Several members said "OK as is" and others described areas for improvement. The primary area seemed to be a concern that all types of papers that presently are published in the Journal receive fair judgement under the criteria. With your comments and suggestions in mind, I have reworked the document titled "Criteria and Instructions...." as well as the rating sheet itself. Moreover, I have enclosed "old" and "new" forms so that you may see the changes. You, of course, will use the "new" forms to complete your ratings. Each change is described below:

1. The word "issue" has been added in criterion 1 to better reflect the intent of position papers and other qualitative scholarly articles.
2. Old criterion 4 is now new criterion 5 and has been renamed "Potential Impact of the Outcomes or Positions" to better reflect its intent.
3. Old criterion 5 is now new criterion 4 and is named "Significance of Conclusions or Positions" to better reflect its intent, which is the general importance of the conclusions, not their statistical significance.
4. The descriptions of each criterion have been edited to hopefully improve their clarity.
5. The "JRST Award Article Evaluation Form" has been modified for consistency with the revised criteria.

Thanks for your efforts and cooperation in the process of selecting the JRST Award recipient and the periodic checkup of the process itself. If you have any questions about the JRST Award selection process or the periodic checkup, please do not hesitate to contact me. UIC has a new telephone system, and I have a new telephone number. My office phone number is now (312) 413-2406. After the third ring, the call is automatically forwarded to the Curriculum, Instruction, and Evaluation office. A secretary will answer and take a message. UIC has encountered the usual "bugs" in the new system. If I don't answer and the call is not forwarded, you can leave a message with the secretary by calling the CIE office directly at (312) 996-4508. If this, too, fails, then call me at home before 9:30 PM at (312) 779-8923.

---

**EXECUTIVE SECRETARY**

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

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# NARST

PAGE 3

NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

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**PRESIDENT**

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

Hopefully, I have now covered all bases. Have a good  
summer.

Sincerely,

John R. Staver  
Chairperson,  
JRST Award Committee

---

**PRESIDENT-ELECT**

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

---

**IMMEDIATE PAST PRESIDENT**

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

---

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

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Education Department  
Mills College  
Oakland, CA 94613

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

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Science Education Department  
University of Georgia  
Athens, GA 30602

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

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

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

---

**JOURNAL EDITOR**

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

---

**RESEARCH COORDINATOR**

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

"NEW"

**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 prespective?

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.

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

"OLD"

You should 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 you should review the ratings across articles to insure objectivity and reliability.

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

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

4 "NEW"

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 ARTICLE EVALUATION FORM

"OLD"

JRST Volume 23, 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
- 2. \_\_\_\_\_ Background
- 3. \_\_\_\_\_ Approach
- 4. \_\_\_\_\_ Significance of Outcomes
- 5. \_\_\_\_\_ Significance of Conclusions
- 6. \_\_\_\_\_ Uniqueness
- 7. \_\_\_\_\_ Communication
- 8. \_\_\_\_\_ Overall

TOTAL \_\_\_\_\_

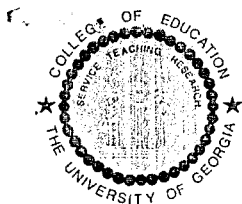
Return to:

Dr. John R. Staver  
 University of Illinois at Chicago  
 College of Education  
 Box 4348  
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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	8	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	

THE UNIVERSITY OF GEORGIA  
Department of Science Education  
212 Aderhold Hall  
Athens, Georgia 30602



College of Education

(404) 542-1763

TO: Linda DeTure  
President NARST

FROM: R. Yeany, Editor  
JRST

DATE: Nov. 4, 1987

RE: Interim Journal Report and Editorial Board  
Nominations

The attached tables indicate the current manuscript flow of the JRST and a list of nominations for the Editorial Board for Executive Board approval.

*1r*  
*New Editor for 1989 - Douglas*  
*1990 new team*  
*Yeany - discuss model for*  
*5yr term (1 yr. as*  
*4-yr editor)*

TABLE 1  
 MANUSCRIPT RECORD VOLUME 24 (1987)\*

DESCRIPTION	1982	1983	1984	1985	1986	1987
Manuscripts Received	142	132	147	150	160	105
Manuscript Pages Rec'd.	2410	2675	2840	3021	3200	2625
Comments & Criticisms	14	11	4	6	4	5
Book Reviews	5	0	2	0	0	0
Manuscripts Accepted	69	81	56	59	60	45
Manuscript Pages Accepted	1716	1915	1120	1169	1200	1125
Manuscripts Rejected	64	75	47	44	50	40
Manuscripts Deactivated	4	8	0	0	0	0
Manuscripts in Revision	36	29	24	51	30	40
Manuscripts in Review	7	9	11	56	20	20
Acceptance Rate (%)	50	49	56	58	38	42
Rejection Rate (%)	50	51	47	46	31	38

\*Through October 31, 1987.

FIGURE 1

## 1987 JOURNAL EDITORIAL BOARD

	1st Term	2nd Term		1st Term	2nd 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  
1987 JOURNAL EDITORIAL BOARD

	1st Term	2nd Term		1st Term	2nd 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