



NARST

Newsletter

NEWSLETTER OF THE NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

APRIL

1970

NEWSLETTER

Editor: Paul DeHart Hurd, President NARST
School of Education, Stanford University

This issue of the newsletter is devoted primarily to the affairs of the association. The constitution, newly approved by-laws, committee memberships, financial reports, and Board actions should be carefully read by every NARST member. Your officers and board members are making a major effort to bring the 700 member association into an efficient and smooth working organization. To achieve this end requires the cooperation of all members both financially and professionally.

In many ways we passed the adolescence of our existence this past year, the evidence: our largest convention ever; a successful and increasingly respected journal; an about "break-even" financial status; an outstanding volume of research abstracts; and a membership that is doing some of the best educational research to be found today. We, for sure, have had some rough times, a number of these resulting from financial conditions and the need to operate all functions of the association on the basis of volunteer help. We do not have a national office and at times it is difficult for new and old members alike to know how to communicate with the organization and to learn what is happening. In this issue of the newsletter it is our purpose to get everyone up-to-date about our affairs and plans.

One problem that limits our effectiveness is finances. Our dues of \$10.00 per year, \$6.00 of which is immediately paid out to the publisher of the journal, leaves us without sufficient funds to operate the association. How have we been getting by: last year we had nearly \$6,000 in donations from a few members of NARST and from outside agencies. The Executive Board recognizes that a more even distribution of financial costs among

the membership must be made to sustain NARST in the future. At the March, 1970 meeting of the Board it was voted to raise the dues for 1971 to \$15.00 and if we can increase our membership to 1000 this year we should be able to maintain a balanced budget for the next few years. The new by-laws require that any action to increase dues be submitted to the total membership for approval and this we are doing. Attached to this newsletter is a ballot for you to indicate your vote on the Board's proposal. The officers of NARST encourage a "yes" vote.

FIRST ANNOUNCEMENT OF THE NARST MEETING, MARCH 23-25, 1971, AT THE SILVER SPRING, MARYLAND, SHERATON HOTEL -- JUST PRIOR TO THE AETS-NSTA MEETINGS IN WASHINGTON, D. C.

Wayne Taylor and I spent a full day in the Washington area considering possible sites for the NARST meeting. The Silver Spring Sheraton is ideal for our meetings, with good meeting rooms, sleeping rooms, food and a great place for a cocktail hour which is already scheduled for Wednesday p.m., March 24! Prices are tolerable and transportation connections good. There is limousine service from the three major Washington airports and taxi service from Washington or from the new Maryland Penn-Central Metro Liner Station near Silver Spring. The hotel has a great swimming pool with 85° F water for those of us used to Caribbean type swimming! Plans are for preregistration, a hospitality area with coffee, and an area set aside for job interviews, outside the activity that may occur over cocktails. Oh, yes, there will be symposia, papers, and guest speakers; also a banquet with food. So set aside March 22-25, 1971, on your calendar for the NARST meeting, the 22nd for travel. More information will come with the next newsletter.

1970 Officers of NARST

President

Paul DeHart Hurd, Stanford University

President-Elect

Frank X. Sutman, Temple University

Secretary-Treasurer

T. Wayne Taylor, Michigan State University

Research Coordinator

Robert W. Howe, Ohio State University

Board Members

Eugene C. Lee, Emory University

Dudley Herron, Purdue University

Wayne Welch, University of Minnesota

Roger G. Olstad, University of Washington

Myron Atkin, University of Illinois

J. David Lockard, University of Maryland

1971 NARST Election Committee

Chairman

Willard J. Jacobson, Teachers College, Columbia University

Committee Members

Ronald Townsend, University of Iowa

Edward Victor, Northwestern University

The new NARST By-Laws establish the policy that henceforth the chairman of the Nominating Committee shall be the immediate past-president and two members appointed by the current president. Elections are to be held two (2) months prior to the Annual Meeting of the Association. Nominations for NARST officers can be made by the membership; the procedure is outlined in the By-Laws.

JOURNAL OF RESEARCH IN SCIENCE TEACHING

Editor

O. Roger Anderson
Teachers College, Columbia University

Associate Editors

J. W. George Ivany
Teachers College, Columbia University

Pauline Gratz
Duke University

Mary Budd Rowe
Teachers College, Columbia University

Sidney Rosen, Book Review Editor
University of Illinois

Editorial Advisory Board

Glenn Crumb
Kansas State Teachers College

Milton O. Pella
University of Wisconsin

Joseph E. Jordan
John Wiley & Sons, Inc.

Stephen S. Winter
State University of New
York at Buffalo

Eugene C. Lee
Emory University

Robert Yager
University of Iowa

In the preparation of Volume VI (1969) of JORST the editor and his staff reviewed 97 manuscripts. Of this number 26 were accepted, 11 were accepted with revisions, 28 were rejected and the remainder are under consideration.

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65
97
65
32

Journal of Research in Science Teaching

James J. Robinson has resigned as the editor of JORST and O. Roger Anderson, an associate editor, has been appointed as editor. The Executive Board of NARST expresses its sincere appreciation to Jim Robinson for the excellent work he has done in making JORST a major research journal in education. To O. Roger Anderson the Board promises every assistance for the continued improvement of the Journal.

A major effort is being made to clear the confusion and mix-up in the mailing list for the journal. A revised mailing list is about completed and notices will be sent to all members by April 15, 1970. This notice will include a billing for 1970 dues (includes JORST subscription) and your classification in NARST, either full member or associate. The code for full member on the mailing label is "JN" and for associate member, "AJ." If either your billing or membership classification is incorrect, please correspond with:

Dr. Wayne Taylor, Secretary-Treasurer, NARST
Science and Mathematics Teaching Center
Michigan State University
East Lansing, Michigan 48823

If you have not been receiving the Journal and believe you should have been, write to Wayne Taylor, not to the Journal editor. The last issue of the Journal was Volume 6, Issue 4.

By May 1, 1970 we hope to have the final list of members completed (dues paid for 1970) and after this day all unpaid members will be dropped from the mailing list.

Future issues of JORST will contain a NARST application for membership.

An examination of the mailing list for JORST shows that a number of NARST members are at colleges and universities where the library is not presently taking the Journal. We urge every member to check the magazine list of his institution and request that a subscription to JORST be added if it is not now being received. We need these subscriptions to strengthen the financial resources of the Association.

The Cooperative Committee on the
Teaching of Science and Mathematics

One of the activities of NARST is its participation on the Cooperative Committee on The Teaching of Science and Mathematics, an affiliate of the AAAS. This committee is composed of representatives from 23 science teaching and research societies with an interest in education. N. Eldred Bingham, University of Florida, is the NARST representative on the Cooperative Committee.

The Committee met on October 13 and 14, 1969 in the American Chemical Society Facilities at 1155 Sixteenth Street, Washington, D. C.

The Agenda for the fall meeting included the following:
Progress Reports on Continuing Projects

1. Interaction of High School and College Teachers by Edward Fuller
2. Evaluation of Curriculum Programs by James Rutherford
3. Knowledge Industry and Related Legislation by T. Wayne Taylor
4. Cooperative Committee Program at the AAAS Meetings, by Arnold Strassenburg
5. Purposes and Operation of the Cooperative Committee
 - a. Report of a Special Committee by John Snyder
 - b. Relationship of the Cooperative Committee to the AAAS
 - c. Discussion of Individual proposals
 - d. General reaction and discussion
 - e. Identification of Future Study Problems
6. Miscellaneous business

It was decided to continue operation on much the same basis as in the past, but to again discuss further changes in organization and emphasis at the spring meeting. New and continuing committee assignments were made. Your representative, along with Louis Panush and John De Rose were assigned to a committee on Science in the Middle School. (We'll appreciate suggestions from NARST members.)

The following resolution was formulated and later sent to the appropriate Senators and to Robert H. Finch.

The spring meeting was scheduled to meet at Stoney Brook, Long Island on April 27 and 28.

November 14, 1969

Dear Senator:

The Cooperative Committee on the Teaching of Science and Mathematics, with representation from each of the societies listed on the letterhead, attempts to identify and study problems in the area of science and mathematics teaching, and to recommend to appropriate agencies programs designed to improve educational opportunities for students and teachers of science and mathematics. At the most recent meeting of the Committee, many members expressed the view that the present level of federal support for education and for scientific research is entirely incommensurate with the needs.

At a time when research costs are rising rapidly, and when science activity in many foreign countries is increasing dramatically, a static research budget threatens to undermine the leadership the United States presently exhibits in scientific and technological accomplishment. Some individuals have argued that our limited science resources must now be concentrated on the great problems of today--overpopulation, pollution, the deterioration of our cities, and man's inhumanity to man--at the expense of the search for fundamental principles. While we agree that scientists can and must contribute to the solution of these oppressive practical problems we also insist that the primary resource of those engaged in applied research is the basic knowledge discovered by those who pursue solutions to abstract problems. In the absence of continuing efforts to push back the frontiers of ignorance, we will soon find that efforts to improve the quality of life in the United States are ineffective. We urge you to add your voice and votes to those who favor a strong emphasis on scientific research in the coming years.

During the past decade we have witnessed a remarkable increase in federal spending on education. Yet we see on all sides evidence of need for greater efforts to improve the preparation of teachers, to develop better classroom materials, and to evaluate the effectiveness of innovative instructional methods. In addition, a rising school age population and the growing expectations of all Americans are creating demands for new educational facilities which cannot be met by the traditional private, local government, and state government sources of funding. We urge that the Congress of the United States recognize the urgency of these needs and continue to increase its support of education at all levels.

Finally, we wish to report to you some observations concerning the attitudes of our students and colleagues. There is widespread disenchantment with science among students. Without doubt, much of this results from an identification of science with the war effort, a condition which massive federal support for war-related research tends to exacerbate. The Selective Service is now taking a heavy toll of science graduate students. Many of our colleagues are demoralized by

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recent failures to find support for lifelong research and educational projects. Further cutbacks in federal support could well contribute to the production of a generation of scientifically illiterate Americans.

We are most grateful for your attention to these matters. We believe that your continuing support of the scientific enterprise is essential to the future health and welfare of the United States.

Sincerely,

A. A. Strassenburg, Chairman
Cooperative Committee

AAS/lac

NEWS OF MEMBERS

J. Darrell Barnard, New York University, a former president of NARST, received one of the 1970 NSTA Citations for Distinguished Service to Science Education. Philip G. Johnson, emeritus Cornell University, a long time member of NARST, was also a recipient of a 1970 NSTA Distinguished Service Citation. These NSTA Citations are made to "individuals who have over a number of years contributed significantly to the advancement of science teaching and education in the sciences. The recipients are recognized for the active leadership and scholarly endeavor which they have devoted to science education and to the public support and knowledge of science."

A copy of "A Plan for the Implementation of New Elementary School Science Curriculum Programs in Colorado," which is available to anyone who wishes to write for a copy, was prepared by personnel of the University of Colorado and the Colorado State Department of Education. It is based upon their two years of experience with an NSF sponsored implementation program and their plans for future assistance to schools in the state. They have initiated a program of extensive inservice education and assistance in the implementation of AAAS, ESS, and SCIS for districts which include over one-half of the elementary school teachers in the state. Direct requests to: Ronald D. Anderson, School of Education, University of Colorado, Boulder, Colorado 80302.

N. Eldred Bingham, University of Florida, Gainesville, has been appointed Editor of Science Education. The journal will be published by John Wiley & Sons, Inc. Professor Bingham welcomes manuscripts from NARST members and urges each to subscribe to Science Education.

The Education Book List has selected from 400 books nominated for consideration New Directions in Teaching Secondary School Science (Rand McNally, 1969) by Paul DeHart Hurd as one of the 20 outstanding education books of 1969. His latest book, New Curriculum Perspectives for Junior High School Science (Wadsworth), was released February, 1970.

Paul F. Ploutz will be on sabbatical leave from his science teaching position at Ohio University, Athens, Ohio from July 1970 through September 1971. He will be working on science games, toys for children, and will be available for consulting work with industry, publishers and schools.

M. Daniel Smith spent a month in India recently as a consultant in instructional technology to the State Institute of Education of Maharashtra. This was supported by AID through the NEA. Dr. Smith is Associate Professor of Education at the University of New Hampshire.

Paul DeHart Hurd, Stanford University, received the NASA Apollo Achievement Award for 1969 in recognition of his contributions to lunar exploration.

The 1970 Annual Meeting Highlights

--The 1970 NARST meeting had the largest attendance in the history of the association, a total of 325 registrations including 100 graduate students.

--This year there were three invited papers, a new feature for the NARST meetings. The papers will be published in a forthcoming issue of JORST. This part of the program was made possible by Robert W. Howe, ERIC Science Center, Ohio State University.

--Approximately 60 percent of those presenting papers at the 1970 meeting had previously appeared on NARST programs. This may indicate that as a professional group we have an increasing number of on-going research programs among the membership.

--The handsome volume of abstracts, delivered to all NARST members prior to the annual meeting, was managed by Robert W. Howe and his staff at Ohio State University.

--A total of 185 persons had a part in the 1970 convention.

NATIONAL ASSOCIATION FOR RESEARCH
IN SCIENCE TEACHING

Purpose - Constitution - By-Laws

The NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING is an organization devoted to the pursuit of research in curriculum organization, course content and teaching methods in the field of the sciences. Membership in the Association includes science teachers and administrators at all levels, elementary, secondary and college. The organization was founded in 1928 at Cambridge, Massachusetts.

NARST meets annually, usually in February or March. At the meetings, research papers in the field of science education are presented, along with symposia on topics of interest to teachers and educational research workers. Since 1947 the Association has included committees for the review of science education research at the elementary, secondary, and college levels in cooperation with the U. S. Office of Education. The reviews have been published annually. Reviews of research are now done at the ERIC Center for Science Education Research at Ohio State University and the NARST Research Coordinator assists in the work of the Center.

Membership in NARST is by nomination and election. The constitution provides for membership drawn from those active in research in science education, and those outstanding in science educational leadership. Associate Membership is available to anyone interested in the purposes of the Association. NARST is affiliated with the American Association for the Advancement of Science, and for the past several years has cooperated with the other science teaching organizations in sponsoring a program at the annual meeting of the AAAS, and a joint session with AERA.

ARTICLES OF INCORPORATION

of

THE NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

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

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

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

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

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

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

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

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

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

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

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

ARTICLE IX This corporation shall have no capital stock.

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

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

NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

BY-LAWS

SECTION 1: MEMBERSHIP

A. Eligibility

This Association shall consist of those who have had the preparation, demonstrated the competence, and evidenced the interest to make important contributions to the field of science education. The usual preparation for members is an earned doctorate in science education or its equivalent. Competence is usually demonstrated by a report of a research study or of an application of research in science education. Interest is evidenced by completing the form for application for membership. Individuals who have contributed outstanding service to the advancement of science education may be admitted to the Association.

B. Classes of Membership

The membership of the Association shall consist of Members and Associate Members.

C. Election of Members

Proposed new members shall supply the information requested on an application form that can be obtained from the Secretary. This application form will request name, address, academic background, professional background, research contributions, and other information.

Final approval of membership applications are the responsibility of the Executive Board. The Board may delegate to one or more officers the authority to approve the applications of those who clearly meet membership requirements. The names of those elected shall be read at the Annual Meeting.

Only completion of an application form is necessary for Associate Membership.

All resignations shall be sent to the Secretary in writing.

If the dues of a member remain unpaid beyond six months after due notice, the Secretary shall remove the name from the membership list.

Any former member may have his membership reinstated, without prejudice and without re-election, on request to the Secretary and payment of annual dues for one year beginning at the particular calendar year.

SECTION 2: DUES AND CONTRIBUTIONS

The annual dues shall be recommended by the Executive Board and established by a majority vote of all members by mail ballot. The dues shall cover one calendar year and shall become payable at the beginning of the calendar year.

A person, association, or institution interested in furthering research in Science Education, may be designated a Patron. Patrons must contribute one hundred dollars or more to the Association per year. The exact sum and formal approval must be negotiated individually with the Executive Board.

SECTION 3: OFFICERS AND EXECUTIVE BOARD

A. Officers

The officers of the Association with specific duties include:

1. President who shall act as chairman of the Executive Board, have general charge of the affairs of the Association and preside at all business meetings, be an ex-officio member of all committees, and arrange a symposium for the Association at the Annual Meeting of the American Association for the Advancement of Science.
2. President-Elect who shall preside at all business meetings in the absence of the president and be chairman of the program committee for the Annual Meeting.
3. Past-President who shall serve as voting member of the Executive Board, act as chairman of the policy committee, and serve as chairman of the election committee.
4. Secretary-Treasurer who shall keep an account of the receipts and expenditures, pay all bills of the Association, make a report to the members at the Annual Meeting, and prepare a proposed budget for the forthcoming year. Provide membership list, maintain a directory, and supply mailing labels for conducting of the Annual Meeting.
5. Research Coordinator who shall act as chairman of the research committee, organize and supervise the research activities of the Association (subject to review by the Executive Board), make a report to the Association at the Annual Meeting.
6. Board Members who shall serve as voting members of the Executive Board, serve on standing and special committees as requested.

B. Executive Board

The officers (president, president-elect, the immediate past president, secretary-treasurer, research coordinator) and six Board Members-at-large shall constitute the Executive Board of the Association. Ex-officio members of the Executive Board shall consist of the editor and chairman of the standing committees who are not already full members of the Executive Board.

The Executive Board shall be empowered to transact all official business for the Association. It will meet prior to and following the annual meeting. The Executive Board shall consider all business and accept or reject decisions and actions taken by the officers between meetings of the entire Executive Board. The Executive Board may use the mails and/or wire service for transacting business that cannot be delayed until the time of the Annual Meeting.

Only elected members of the Executive Board may cast official votes in the transaction of business. Ex-officio members of the Executive Board may enter fully into all discussions and other matters concerning the business brought before the Board either in formal meetings or by mail or wire transactions.

C. Terms of Office and Eligibility

Only Members shall be eligible to hold office. Candidates for office of president-elect must have been a member of the Executive Board. Neither the president nor president-elect shall be eligible for election to the same office for a second term.

Two of the six Board Members-at-large shall be elected to three year terms each year. The president, with the consent of the majority of the Executive Board, shall appoint Members-at-large to fill positions vacated before completion of the term. Board Members-at-large shall be ineligible for serving more than one three year term.

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

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

The secretary-treasurer shall be elected to a three year term. He is eligible to be elected to only one additional three year term as one candidate on a competitive ballot.

The editor shall be appointed by the Executive Board to a five year term. He shall be eligible for re-appointment to additional terms at the pleasure of the Executive Board.

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

The terms of office for the secretary-treasurer and the editor can be reduced from the three or five year period by two-thirds vote of the other members of the Executive Board. If the offices of editor, secretary-treasurer, or research coordinator are vacated before the end of the separate terms, the Executive Board shall fill the unexpired terms by appointment.

D. Election of Officers

At the regular Annual Meeting, the president shall appoint an election committee of three to prepare mail ballots for electing officers for the next ensuing year. A slate of two or more nominees shall be selected for each vacant office.

The slate proposed by the election committee shall be published in the Newsletter at least four (4) months prior to the Annual Meeting.

Additional nominations may be made by petition of ten (10) members. Said petitions shall be in the hands of the secretary three (3) months prior to the Annual Meeting.

Ballots shall be mailed by the secretary-treasurer to all members eligible to vote two (2) months prior to the Annual Meeting. The completed ballots shall be returned to the chairman of the election committee for counting no later than four (4) weeks from date of mailing to members.

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

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

SECTION 4: PUBLICATIONS

A. Editor

An editor shall be selected in the manner as previously described. He shall serve on the Executive Board and the Publications Advisory Committee in an ex-officio capacity. He shall absent himself from these sessions when policies and considerations are being made where his absence is suggested.

The editor shall administer all publication ventures of the Association. He shall delegate responsibilities to others with approval and consent of the Publications Advisory Committee and the Executive Board.

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

The editor shall work with the Editorial Board in the publication of the Journal of Research in Science Teaching. He shall seek the approval of the Publications Advisory Committee and the Executive Board for the organization and the appointment of the persons to serve as associate editors and as other members of the Editorial Board.

B. Editorial Board

The editor, the associate editor, and members of a special review committee shall be known as an Editorial Board with the editor as chairman. The Editorial Board shall be responsible for evaluating papers submitted for publication in the Journal of Research in Science Teaching.

The Editorial Board will be responsible for carrying out the policies suggested by the Publications Advisory Committee and approved by the Executive Board. The size of the Editorial Board shall be determined by the necessary divisions of labor in preparing the Journal. The Editorial Board may request changes in policy by making recommendations to the Publications Advisory Committee for appropriate consideration. The Executive Board may make specific recommendations directly to the Editorial Board concerning Journal policy.

SECTION 5: MEETINGS

The Executive Board shall arrange the time and place of the Annual Meeting and may arrange additional meetings. The business meeting of the Association shall be held at the time and place of the Annual Meeting.

Roberts Rules of Order, Revised, shall govern the conduct of all meetings held by any group whatsoever in conducting the business of the Association except as otherwise specified in the Constitution or By-Laws.

SECTION 6: COMMITTEES

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

- 1) Policy Advisory Committee - Members include: past president as chairman; two members (with two year rotating terms), president-elect (ex-officio); Duties are: annual review of By-Laws, changes in structure or orientation of the Association, review of new activities or ventures of the Association.
- 2) Financial Advisory Committee - Members include: chairman (three year term), three members (with three year rotating terms), secretary-treasurer (ex-officio); Duties are: consider annual budget prepared by the secretary-treasurer, approve of program expenses, approve of publication costs and new ventures, offer advice and recommendation to the Executive Board regarding all financial affairs of the Association, arrange for an audit of Association accounts at least every three years.
- 3) Publications Advisory Committee - Members include: chairman (three year term), three members (with three year rotating terms), editor (ex-officio); Duties are: establish policy concerning the Newsletter, the Journal, and special publication ventures of the Association, review arrangements with editors of publications, suggest changes in yearly publication practice to the Executive Board.
- 4) Program Committee - Members include: president-elect as chairman, three members (with one year rotating terms), research coordinator (ex-officio); Duties are: establish theme and format for Annual Meeting, arrange for special speakers and symposia, evaluate abstracts for contributed papers. (A local arrangement committee may be established if desired.)
- 5) Research Committee - Members include: research coordinator as chairman, three members (with three year rotating terms); Duties are: prepare yearly reviews of research in science education, work closely with ERIC Center, recommend needed areas of research, research symposia, and training programs.
- 6) Election Committee - Members include: past-president as chairman, two members (with one year terms each); Duties are: establish slate of officers for each election four months prior to date of Annual Meeting, make arrangements for preparation and distribution of ballots three months prior to the Annual Meeting, tabulate election results, notify candidates of the outcome of the election a month prior to their assuming office, announce election results at Annual Meeting, arrange for installation of new officers and transfer of the responsibilities of Executive Board for the Association.

The nature and duties of special committees shall be specified at the time of appointment.

Each special committee appointed by a President shall be considered automatically discharged at the close of the Annual Meeting next following the appointment, unless specific action to continue the appointment be taken by the President who enters the office at the close of the Annual Meeting.

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

SECTION 7: DISSOLUTION

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

In the event of dissolution of the Association, the Executive Board shall, after payment of debits and obligations, transfer the net assets to the American Educational Research Association for its charitable and educational purposes, especially for research in education; provided, the American Educational Research Association is then exempt from Federal income taxes as a charitable and/or educational organization. If the American Educational Research Association is not then so exempt, the net assets, as aforesaid, shall be transferred to any nonprofit university, or to any other tax exempt agency selected by the Executive Board because of its interest in improving and advancing educational research.

If, six months after dissolution of the Association, the foregoing provisions have not been acted upon, the Executive Board of the American Educational Research Association shall have authority to carry out the provisions of this section. If, in taking this action, the American Educational Research Association is not then exempt from Federal Income Taxes as a charitable and/or educational organization, the Executive Board of the American Educational Research Association shall transfer the net assets, as aforesaid, to a tax exempt organization which has recognized charitable and/or educational purposes.

SECTION 8: AMENDMENTS

The By-Laws may be amended by affirmative votes of a majority of those returning ballots by mail. Proposed amendments and/or changes will be proposed by the Policy Advisory Committee. The results of this deliberation shall be approved by the Executive Board. After this the amendment or change will be circulated to the membership by the secretary along with a ballot. A majority of those responding must indicate approval before the By-Laws are amended.

Spring 1970

NARST PLACEMENT INFORMATION EXCHANGE

In order to conserve on mailing expenses, a listing of "Positions Open" and "Personnel Seeking Positions" that have been reported since the January mailing is included with this Newsletter. It is anticipated that any additional placement information reported to the Committee during April will be included in the May NARST Newsletter.

Anyone desiring placement information cards to report "Personnel Seeking Positions" or "Positions Open" should request these from:

NARST Placement Committee
Center for Science Education
410 Lyman Hall
Syracuse University
Syracuse, New York 13210

Those individuals who did not receive the January NARST Placement Information listings may request them from the NARST Placement Committee.

POSITIONS OPEN, Spring 1970

Location & Starting Date	Title & brief job description	Tentative (T) or Defi- nite (D)	Salary range	Contact
Boston University School of Education 765 Commonwealth Ave. Boston, Mass. 02215 September, 1970	Elementary Science Education: Instruction, Advisement, and Consultation	D	\$11,000-13,250 (Summer Extra)	Dr. Gilbert Wilson, Chairman Div. of Curriculum and Instruction Boston University School of Education 765 Commonwealth Ave. Boston, Mass. 02215 (617) 353-3234
Buffalo State College Buffalo, N.Y. 14222 September, 1970	Instructor - to teach PSNS & Supervise student teachers.	T	\$9,000	Dr. Darrell D. Young, Chairman, Dept. of General Science Buffalo State College Buffalo, N.Y. 14222 (716) 862-6731
California State College Hayward, California 94542 September, 1970	Half time Biology & half time Sci. Ed. & Student teacher supervision, biology secondary.	D	\$9-10,800	Dr. D. Parnell Dept. of Biological Science Calif. State College Hayward, Calif. 94542 538-8000
Eastern Kentucky Univ. Science Educa. Center Richmond, Kentucky 40475 September, 1970	Elementary and/or secondary science methods.	D	\$9,500-13,500	R. H. Barker or Robert Miller Science Education Center Eastern Kentucky Univ Richmond, Ky. 40475 (606) 622-3236

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POSITIONS OPEN, Spring 1970 (Cont'd)

Location & Starting Date	Title & brief job description	Tentative (T) or Definite(D)	Salary range	Contact
Elizabethtown College Elizabethtown, Pa. 17022 September, 1970	Clinical Prof. of Sec. Sci. Ed. Teach introductory physics & Sec. Science	D	\$10-11,500	Dr. W. Miller Elizabethtown College Elizabethtown, Pa. 17022 (717) 367-2726 Ex 247
University of Maryland College Park, Maryland 20742 September, 1970	Joint Appointment in Sci. Education (Sec.) and Physics Dept. - Teaching and/or Research in Both Depts.	D	open	Dr. J. David Lockard Science Teaching Center Univ. of Maryland (301) 454-4028
Portland State University General Science Dept. P. O. Box 751 Portland, Oregon 97207 September, 1970	Teaching General Biology via Audio-Tutorial method. School of Education joint appointment with the Science Division	D	\$10-12,000	Dr. Michael Fiasca Portland State Univ. P.O. Box 751 Portland, Oregon (503) 226-7271 Ex 244
Southwest Minnesota State College Marshall, Minn. 56258 September, 1970	Science Education - Elementary	D	\$9,500-14,000	Dr. Richard Wollin, Ch. Div. of Ed. Southwest Minnesota State College Marshall, Minnesota 56258
University of Wyoming Laramie, Wyoming September, 1970	Ass't. Prof. of Sci. Ed. & Ass't. Prof. of Natural Sci. (joint appointment). Teach biology, methods courses (Sec) & biology for elem. teachers.	T	open	Dr. B. W. Tillery Univ. Station Univ. of Wyoming Box 3992 Laramie, Wyoming 82070 (307) 766-6350

PERSONNEL SEEKING POSITIONS, SPRING 1970

BASHOOK, Philip G.
Dept. Sci. Ed.
Univ. of British Columbia
Vancouver 8, Canada
604-228-2141

Field of Interest: Evaluation and Curriculum Development
Anticipated Degree Date: December, 1970; Univ. of British Columbia
Type of Job sought: Research opportunity in evaluating science programs
or developing programs

Background notes: Res. Assist., Physics Education Evaluation Project.;
Teach. Assist., Dept. Zool.; Wrote Laboratory Manual for Univ. Biology
course.; Devel. Junior High set units on Environmental Sciences.

BORN, David O.
905 Cindy
Carbondale, Ill. 62901
618-457-5977

Field of Interest: Ed. Anthropology

Anticipated Degree Date: August, 1970; So. Ill. Univ.

Type of Job sought: Research - Teaching

Background notes: Ph.D. in Ed. Psych. (Human learning); Ed. Anthro.
field work w/Eskimo.

CALDWELL, Harrie G.
410 Lyman Hall
Syracuse University
Syracuse, N. Y. 13210
315-476-5541 ex.2586

Field of Interest: Elem. Sci. Ed.

Anticipated Degree Date: Have a Ph.D. in Sci. Ed., Syracuse Univ.

Type of Job sought: Research, Development & Teaching in Teacher Education

Background notes: Audio-tutorial course for Elem. Sci. Tchrs.; 3 yrs.
teaching in public schools; 3 yrs. at college level.; Research in
Interaction analysis, semantic differentials and teacher education.

COHEN, Ronald D.
9737 Galena Avenue
Montclair, Calif. 91763
714-621-1927

Field of Interest: Instructional Theory

Anticipated Degree Date: June, 1970 Ph.D., Claremont Graduate School

Type of Job sought: Teaching and Research dealing with models of
affective communication in curr. & instruction.

Background notes: Chmn., Sci. Dept. - 6 yrs. Anaheim (Calif.) V.H.S.D.;
Consultant, IDEA/Kettering Foundation; Encyclopaedia Britannica Press,
Inc.; Co-Director Temple City (Calif.) Differentiated Staff Model.;
Internship, (NTL) Sensitivity Training.; Published papers.

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PERSONNEL SEEKING POSITIONS, SPRING 1970 (Cont'd.)

FRANK, Charles O.
B-35 New Slocum Heights
Syracuse, N.Y. 13210

315-476-5541 ext.2586

Field of Interest: Earth Sci. Ed.

Anticipated Degree Date: Sept., 1970; Syracuse University

Type of Job sought: Geology - Earth Sci. - Tch. prep.

Background notes: Supervisor student teachers; Strong Geology Background;
High School Teaching.

GLASS, Lynn W.
1108 5th Ave.

Iowa City, Iowa 52240

351-3474

Field of Interest: Biology

Anticipated Degree Date: May, 1970; University of Iowa

Type of Job sought: Science Educ.

Background notes: Public School Exp. 3 yrs.; Teaching Univ. of Iowa
3 yrs.; Research Science Educ. and Biology.

HORN, Jerry G.
3805 West Radcliff Ave.
Denver, Colorado 80236

303-794-0579

Field of Interest: Secondary (Biology) and/or Elementary Science

Anticipated Degree Date: August, 1970; University of Colorado

Type of Job sought: College or University position in Science methods
at the secondary or elementary level

Background notes: Public School - teacher and science dept. chairman
(7 yrs.); Supervised an NSF - Co-op Program for 2 yrs. in the
implementation of ESS, AADS, & SCIS materials.; Presently research
assistant on the National USOE - Title I evaluation.

JACOBS, Joseph H.
60 Seaview Terr.

Northport, N.Y. 11768

516-261-1576

Field of Interest: Curriculum (below average) Teacher Training

Anticipated Degree Date: October, 1970; New York University

Type of Job sought: Science Education, Supervision

Background notes: Science Teaching Secondary & College.; Curriculum
Eval. & Construction.; Teaching Asst. & Instructor in Courses of
Classroom Analyses.; Taught Science in urban and suburban schools
at diff. ability levels.

PERSONNEL SEEKING POSITIONS, SPRING 1970 (Cont'd.)

LEWIS, Roger D.
2123 Longview Drive
Tallahassee, Florida 32303
904-385-7203

Field of Interest: Sec. Teacher Ed., Individ. Inst.

Anticipated Degree Date: June, 1970; Florida State University

Type of Job sought: Teacher Education. Development of Individual Instruction Programs. Research in Teacher Ed.

Background notes: College Physics Inst.; High school physics and math.; Pennsylvania Teaching Certificate.; Coordinator and Instructor for Project Physics Institute.

MAHONEY, Vincent D.
2812 San Benito Drive
Walnut Creek, Calif. 94598
415-935-7296

Field of Interest: Both Elementary and Secondary Teacher Training

Anticipated Degree Date: June, 1970 - Ph.D.; Univ. of Calif. Berkeley

Type of Job sought: Teacher Training - Science Curriculum Methods

Background notes: Secondary Science Supervisor at Univ. of Calif. (Berkeley).; Harper Row Publishers, Calif. Science Series - Jr. High Level.; Jr. High Science Teacher (Physical Sciences) Walnut Creek, Calif. (1963-1968).; Summer workshop experiences in elementary (K-6) and Jr. High (7-9) at graduate college level for in-service teachers.

MARSICO, Joseph G.
8 North View Drive
Geneseo, N.Y. 14454
716-243-2103

Field of Interest: Elem. & Second. Methods

Anticipated Degree Date: -- 1962; Univ. of St. Thomas, Manila

Type of Job sought: College Teaching of Elem./Second. Methods; Science curr. coord. public schools.

Background notes: 25 yrs. tch.; 13 yrs. college, 5 in science methods, 8 in tch. general physics, 11 yrs. high school - science & math.; (6 yrs. in Manila).

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PERSONNEL SEEKING POSITIONS, SPRING 1970 (Cont'd.)

SAGNESS, Richard L.
248 Arps Hall
The Ohio State University
Columbus, Ohio 43210
Home: 262-3576
Office: 293-4121

Field of Interest: Teacher Ed. and Biology Ed.
Anticipated Degree Date: June, 1970; The Ohio State University
Type of Job sought: Science Teacher Education, General Education Biology
Background notes: High School Biology Teacher & Science Dept. Chairman.;
Lecturer in Biology, Kansas State Teacher College at Emporia.;
Document Analyst & Retrieval Specialist ERIC for Sci. Ed.; Admin.
Asst. Sci. Ed. Dept. The Ohio State University.

WILLIAMS, Thomas B.
271-19 Schucht Village
Gainesville, Florida 32601
904-378-5662

Field of Interest: Earth Science
Anticipated Degree Date: September, 1970 (Ph.D.); Univ. Florida
Type of Job sought: Curriculum Director -/or College Teaching
Curriculum (General/Science),/or Research Methodology
Background notes: Secondary Science Teacher - Physical, Earth and
Biological - 3 yrs., Sci. Consultant to Title III Program - 1 yr.;
NSF AYI in Earth Science.

WOLFSON, Morton L.
123 Skidmore Road
North Babylon, N.Y. 11703
516-667-8507

Field of Interest: Research-Teacher Training
Anticipated Degree Date: June, 1970; New York University
Type of Job sought: Research, Teacher Training.
Background notes: 20 yrs. Teaching Chem. & Phys. Sr. High Schools -
NYC & L.I.; Part time instructor - John Jay College NYC - 2 yrs.