

NARST Newsletter

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NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING

December 1983

President's Column:

An exciting program has been planned for the 1984 Annual Meeting in New Orleans, April 27th to 30th. We will have two and a half days packed with papers, addresses, workshops, and social hours. An additional event of interest to many of you will be a special session jointly sponsored by the International Reading Association (IRA), AERA, and NARST. This session, to be held on the afternoon of April 26th at the AERA meeting, will be devoted to "Learning from Science Texts and Materials".

The NARST letterhead reminds us that our purpose is to "improve science teaching — through research." To me that means producing, identifying, and interpreting research that will have an impact on policy and practice. Bridging the gap between research and practice is not an easy task but that's what we claim as our speciality. In addition to keeping up with what's happening in the schools and staying on top of our own areas of research, we also need to be aware of what researchers in other fields of education are doing. It is this last need that is served by our meeting with AERA. Plan to come to New Orleans early so you'll be able to attend at least a part of the AERA meeting which is scheduled for April 23-17. You will learn what the current issues and methods are in other areas and you will almost certainly learn some new ideas that can be useful in your own work. And don't forget that New Orleans is one of the most interesting cities in the country with good food and music and its own unique ambience.

It is always a matter of considerable interest when the editorship of the *Journal of Research in Science Teaching* passes from one editor to his or her (so far only *his*) successor. Since the term of the present editor, Jim Shymansky, will expire in 1984, the process of selecting a new editor is well underway and we expect to be able to announce the name of the

successful candidate in the next newsletter. Jim has done an outstanding job. The new editor will take over a *Journal* that is strong and influential and that is very important to us as individuals and to NARST.

The two most important functions in NARST are the annual meeting and publication of the *Journal*. It is through these avenues that the professional growth and achievements of our members are stimulated, promoted, and recognized. Your support and participation in both the annual meeting and the *Journal* are needed to keep NARST a valuable and useful organization.

I would like to see all of you in New Orleans and in the pages of the *Journal*.

Ann C. Howe
President, NARST

Record Number of Proposals Submitted to 1984 Program Committee

NARST members submitted about 140 research-paper proposals for consideration by the program committee in charge of the 1984 annual meeting in New Orleans. Never before have so many researchers requested time from NARST to present their ideas and findings at an AERA-designated meeting site. This record number of submissions suggests to us that a possible record number of people will attend the New Orleans meeting relative to our previous expectations.

The Monteleone Hotel in New Orleans will house our 1984 annual meeting, April 27 (evening) to April 30 (morning).

The hotel is in the heart of the French Quarter and is considered one of the very best hotels for our needs. The Monteleone is the only modernized hotel of any reasonable size with the traditional flavor of

old New Orleans. The Monteleone was founded in 1888.

A block or two away from this hotel are the AERA-designated hotels (e.g., Marriot, Hilton). These "AERA" hotels are equivalent in quality relative to the Monteleone but have higher room rates. So consider staying at the Monteleone while attending AERA and NARST meetings. Be sure to mail your hotel reservation card enclosed with your last newsletter, as soon as practical.

NARST people are welcome to use the Monteleone and pay the low NARST rates while attending AERA (April 23-27, 1984). These rates for NARST members are \$65 single and \$75 double.

Hertz, the car rental corporation, will provide NARST members in New Orleans with a 20% discount from their standard unlimited mileage rate honored one week before or after and during the dates April 23-30, 1984. Our convention identification number is 95778. Telephone the toll-free number, 800-654-2240, at least two weeks in advance. This announcement will be repeated in the next newsletter.

Registration for NARST Conference

Be sure to complete the enclosed registration form and return it to the NARST headquarters as soon as practical. In this regard, the governing board of NARST unanimously passed a motion at its annual meeting stipulating that registration is a condition for presenting a paper (other than invited papers).

Receipts for 1984 Payments to NARST

Most universities now require people, seeking reimbursement for payments to professional organizations, to present a receipt and not just a cancelled cheque. Therefore, NARST will send receipts for all payments to payers, usually with the next newsletter.

1984 Election of NARST Officers

Please complete the enclosed ballot describing the candidates for the 1984 NARST election.

President-Elect

David P. Butts
University of Georgia

Arthur L. White
Ohio State University

Executive Board

Patricia E. Blosser
Ohio State University

Ronald G. Good
Florida State University

Roger T. Johnson
University of Minnesota

Michael J. Padilla
University of Georgia

David P. Butts, Ph.D. University of Illinois, 1962

Present Position: Professor of Science Education
University of Georgia

Dave Butts received his B.S. degree with majors in biology, English and history in 1954 from Butler University, Indianapolis, Indiana; his M.S. in Science Education and botany in 1960 from the University of Illinois; and his Ph.D. in Science Education in 1962 from the University of Illinois. Dr. Butts has been a college teacher for twenty-four years, ten at the University of Georgia, twelve at the University of Texas and one each at the University of Illinois and Olivet Nazarene College, Kankakee, Illinois. His main work has been teaching and doing research in curriculum and instruction in science in the elementary and middle school. Currently, he is chairman of the Department of Science Education at the University of Georgia.

Dr. Butts was a contributing author of the American Association for the Advancement of Science program, *Science - A Process Approach*. He has served as coordinator and science consultant for the Texas Tryout Center of AAAS in the field testing of this program for five years. Through the related activities of the Science Inservice Project, these curriculum materials have been introduced in classrooms of more than 45,000 teachers in Texas' 108 school districts.

Dr. Butts' membership in professional organizations include the National Science Teachers Association, the National Association for Research in Science Teaching. He has served NARST as a member of the Board and as editor of the *Journal of Research in Science Teaching* (1974-1979). He is a past vice-president of the Texas Academy of Science, a fellow of the Texas Academy of Science and a fellow of the American Association for the Advancement of Science. He is listed in the *American Men of Science* and in *Who's Who in the South and Southwest*. He was served as president of AETS and chairman of AETS Commission for Revi-

sion of the Guidelines for the Doctorate in Science Education. In April 1978 he received the Robert H. Carleton Award, in highest honor given by the National Science Teachers Association.

Dr. Butts also served as chairman of a research-development team in the Research and Development Center for Teacher Education at the University of Texas which developed instructional modules for pre- and in-service education of elementary and middle school teachers.

His research and instructional development has resulted in more than 250 publications including 16 books, five monographs, and 49 articles in *JRST*, *Science Education*, *The Science Teacher*, and *Science and Children*. Dave's current research interests are in analytical problems solving using interactive video-disk technology.

Arthur L. White, Ph.D. University of Colorado, 1969

Present Position: Professor of Science Education,
The Ohio State University

Dr. White holds a B.S. degree in physical science and mathematics education from The University of Northern Colorado and a Master of Basic Science degree from The University of Colorado. He began his professional career as a general science, biology, chemistry and physics teacher in the public schools in Kansas and Colorado (10 years). During his doctoral studies, he acquired a concentrated background in chemistry, statistical methods and the use of computer technology. His expertise in these areas has led to a wide variety of research, evaluation and development activities in science and mathematics education. These activities include: research on science teaching practice, concept learning, effects of calculators and computers in school learning, research priorities in science education, evaluation of pre- and in-service science and math teacher education, diagnostic testing for adult learning disabilities, development of calculator and micro-computer activity books for elementary and secondary students in the U.S. and abroad (Mexico, Costa Rica and West Indies).

Current interests include the study of decision making processes in elementary school children and the role of computer graphics in a child's transition from concrete manipulation and understanding of concepts to formal abstract understanding.

During the years 1977 to 1983, Dr. White has served NARST on the Executive Committee as the Research Coordinator and a Program Committee member. He has served as the NARST representative to the NSTA research committee and has been generally responsible for the NARST book of abstracts for the annual meetings. He served the Association as a member of the JRST editorial board from 1976-1979.

Dr. White is currently on the Board of Directors for SSMA and co-chair of their Publications Committee. He is serving NSTA as the co-chair of the Task Force on Evaluation of Computer Software in Science Education and a contributing member of the AETS ad hoc Committee on Computers in Science Education.

Patricia E. Blosser, Ph.D., The Ohio State University, 1970

Present Position: Professor of Science Education,
The Ohio State University.

Dr. Blosser holds a B.A. degree in biology from the College of Wooster (Ohio), an M.A. degree from the University of Northern Colorado, a Master of Arts in Liberal Studies from Wesleyan University (Connecticut). She has been a secondary school science teacher in both junior and senior high schools in Ohio and Illinois. She has been a member of the faculty in Science and Mathematics Education at The Ohio State University since 1970.

She also holds the position of associate director for user services for the ERIC Clearinghouse for Science, Mathematics and Environmental Education, at The Ohio State University. As a professor of science education she was worked with the undergraduate program in science education and, since 1974, has been coordinator of the post-degree/master's program in Science and Mathematics Education. She has served as major advisor for numerous master's degree students, as a committee member on 13 doctoral programs, and is currently major advisor for four doctoral students.

Current interests include teacher behavior research particularly in the area of teacher questioning skills, classroom management techniques, and middle school science education.

Dr. Blosser has served as a member of various NARST committees: Publications Advisory, Elections, Program, and Financial Advisory Committees. She has been a contributor at several NARST meetings. She also serves as editor for *Investigations in Science Education*, as co-editor (with Stanley L. Helgeson) of the annual *Review of Research in Science Education*, and has assisted the various NARST Research Coordinators (Bob Howe, Stan Helgeson, and Art White) in compiling and editing the abstracts of papers presented at the annual meeting of NARST.

Dr. Blosser is also active in NSTA, having served as a regional director for two terms as well as on various committees. She has been president of the Association for the Education of Teachers in Science (AETS) and is currently a director-at-large for that organization. She is also a board member of the state science teachers organization for Ohio, the Science Education Council of Ohio, and serves as editor for the *SECO Journal*. She is a member of the editorial board of *Science Education*, an article reviewer for *Science & Children*, a reviewer for *Books in Print* produced by the American Association for the Advancement of Science, and is a member of the NSTA Science Education Materials Review Committee.

She has published several journal articles, several reviews of research, numerous fact sheets and information bulletins for ERIC/SMEAC, as well as a book (*Handbook of Effective Questioning Techniques*).

At present she is much involved in chairing the Personnel Committee for her department of approximately 60 members as well as serving on the Search Committee for a Dean for the College of Education.

Ronald G. Good, Ph.D., University of North Carolina, 1968

Present Position: Professor of Science Education,
Florida State University.

Ron Good's experience in Science Education prior to receiving the Ph.D. degree in 1968 included the teaching of high school physics and chemistry; Ford Foundation sponsored Graduate work leading to a master's degree at the University of Pittsburgh; NSF sponsored graduate work at Yale University and the University of North Carolina at Chapel Hill leading to a second master's degree and work as an instructor in the Ford Foundation's sponsored fifth year program in Teacher Education at UNC Chapel Hill leading to the Ph.D. Degree. Dr. Good has served on the editorial board for science education and currently serves on the editorial board for JRST. He has published books and papers and presentations at NARST meetings exceed 75 in number. He was a co-recipient of the 1981 JRST award for the paper, "Report explain variance". At Florida State University, Dr. Good continues his work in Science Education, he serves as the coordinator for the Cognance of Science Study Group and Interdisciplinary Group of faculty member in psychology, computer science, philosophy, physics, and

education who are interested in current research in cognitive science.

His current research interests include expert novice problem solving and science knowledge representation by students at various developmental levels. Dr. Good has expressed his belief that NARST should seek ways to do more as an organization to bring research and conclusions into science classrooms.

Roger T. Johnson, Ed.D. University of California, Berkeley, 1969

Present Position: Professor of Science Education,
University of Minnesota

Roger Johnson has taught in 2nd- through 8th-grade classrooms after earning a B.S. degree, and while earning a M.A. degree, from Ball State University. His teaching started in Walt Disney Elementary School (Anaheim, CA) and continued in Jefferson County Public Schools (Colorado). He was a curriculum writer with the Elementary Science Study (E.C.D.) and a Master Teacher in the Harvard-Newton Intern Program. He began his college teaching at the University of California, Berkeley, and now is a Professor of Science Education at the University of Minnesota. He spent four summers teaching at the University of Sussex (Falmer, England) investigating practices in British Primary Schools.

Dr. Johnson was a member of the Project Synthesis Team (NSF) and worked with the 1979 Assessment in Science helping to interpret the attitude toward science data. He chaired the Search for Excellence at the Elementary School level in 1982 and is a member of the NSTA Search for Excellence Advisory Board. He has been a consulting editor with the *American Educational Research Journal* and is currently on the Editorial Board of *JRST*. He is also serving on the NARST Research Committee.

His writing includes the co-authoring of two books, *Learning Together and Alone* (Prentice-Hall, 1975) and *Circles of Learning* (ASCD, in press). He has authored or co-authored numerous chapters in books and monographs including "Mainstreaming handicapped students into science classrooms" in *Teaching Handicapped Students in the Science Classrooms*, M. Corrick (Ed.), NEA, 1981, and "What research says about student-student interaction in science classrooms" in *Education in the 80's: Science*, M.B. Rowe (Ed.), NEA, 1982. His more than 70 research articles include two major meta-analyses in the area of student-student interaction. He has received the Gordon Allport Intergroup Relations Award for 1981 for outstanding research in Division 9, American Psychological Association (with D. Johnson & G. Maruyama).

He is co-director of the Cooperative Learning Center at the University of Minnesota with his brother, David W. Johnson. This center works with a number of school districts and colleges in the U.S., Canada, Sweden, and Norway on the application of social psychology to the classroom setting. Roger Johnson continues to be interested in the structuring of student-student interaction effectively, the appropriate use of controversy in the classroom and the development of the skills for effective collaboration among students and staff.

Michael J. Padilla, Ph.D. Michigan State University, 1975

Present Position: Association Professor of Science Education,
University of Georgia.

Michael Padilla received a B.S. degree in Biology and Chemistry from the University of Detroit, an M.Ed. in Science Education from Wayne State University and a Ph.D. in Science Education from Michigan State University. He taught middle school general science and high school chemistry and life science in the Detroit area. On faculty at the University of Victoria, British Columbia

from 1975 to 1978 and the University of Georgia since 1978, Dr. Padilla has also taught at Michigan State University and the University of British Columbia. He presently teaches undergraduate and graduate methods, microcomputer courses as well as various doctoral level research courses. Padilla has worked with numerous doctoral students, both as a committee member and major professor.

Dr. Padilla's research interests include work on young children's seriation abilities, adolescent reasoning behaviors and the science process skills. These interests have led to many papers at NARST, AETS and NSTA meetings and several articles in *JRST*, *Science Education*, *School Science and Mathematics* and *Science and Children*. In addition, Padilla has received grants from various offices for work on seriation skills, environmental education course development, and research syntheses pertaining to the science process skills. He has served as statewide director of the Junior Science and Humanities Symposium for three years.

Professionally, Dr. Padilla has contributed to many organizations and journals. He has been a member and the chairman of the *Science and Children* advisory board and has edited *The Georgia Science Teacher* for the past four years. He has reviewed manuscripts for *AERJ*, *JRST*, *Science and Children*, and *School Science and Mathematics* as well as various other journals. For NARST he has served as a member of the International Committee, the Membership Committee, and presently is on the JRST Award Committee. Dr. Padilla has also served on numerous NSTA Committees, and has consulted with local school districts, state and provincial Departments of Education and several NSF Grants.