



GOOD NEWSLETTER

Publication of Science Education for Students with Disabilities
Susan Blizard, Community College of Southern Nevada, Editor

Volume 22 Issue 1 September, 1997

SESD President's Message

by Ed Keller, Jr., West Virginia University, Morgantown, WV

Science Education and Disability Concerns,
2000 and Beyond

We move towards the new millennium with our **new name (Science Education for Students with Disabilities)**! There is a need to sharpen the focus on our activities with improvement of communication and cooperative activities among SESD members. In the future, the direction of Science Education for Students with Disabilities will change as a function of many continuously changing factors (viz., medical advancements, strategies of teaching, adaptive/alternative techniques, changing curricula, distance learning, cutting-edge learning environments, contemporary science teaching methods, etc.).

The principal contributions that our group can make is to work on changing the face of science education for students with disabilities with innovations in selecting, testing, analyzing, and dissemination of those cutting edge strategies and technologies. This will help to assure the optimal multi-modal educational environment that includes the appropriate accommodations for science students with disabilities.

For starters, I would like all SESD members with e-mail to forward to me (ekeller@wvu.edu) your e-mail addresses. I will then see that all members receive each other's e-mail address. This will be a first step in enhancing inter-member communication.

Also, I would like to call upon all SESD members to send me (in the e-mail address notification if possible) a short say 3 or 4 lines-list of your professional activities and interests in science education for students with disabilities, so that we can include a variety of members in activities of SESD.

We are again applying for NSTA affiliation so that we can have input, at the board level, to influence awareness and change attitudes and practices that is needed for NSTA to help accommodate science students and teachers with disabilities.

Join Us on the SESD Web Page

<http://www.as.wvu.edu/scidis/organizations/>

to us with your suggestions on brightening, modifying, and new categories.

Please log in and join us. The Web address is:

Our page has been somewhat revised, please check it out and get back

World Wide Web and Internet Sites

Steve Wallin, SESD member, has developed a **web page concerning science education for disabled physics students**. The address is <http://www.science.uscolo.edu/swallin/>. You can also **e-mail** him at swallin@uscolo.edu

Materials Available from Eisenhower National Clearinghouse for Mathematics and Science Education. These materials are resources for math and science educators. The materials were developed by the many federal agencies. They can be accessed at <http://www.enc.org> under the ENC On-line Resource Finder Spotlight.

Triangle Coalition for Science and Technology Education. The Triangle Coalition publishes an electronic newsletter, "TECB". One can subscribe (electronic or hard copy) and/or submit articles for publication. The address is: Triangle Coalition for Science and Technology Education, 5112 Berwyn Road, College Park, MD 20740-4129, Voice phone (301) 220-0870, FAX (301) 474-4381.

Haze SPAN. The Concord Consortium developed this online service to help students and amateur scientists learn about haze research and learn to build haze research instruments. The address is <http://www.concord.org>

QuEST, an activity of the American Federation of Teachers, informs readers about the AFT education reform priorities. The AFT web site has more information. The address is <http://www.aft.org/quest/index.html>

Science Service has gone online with a site intended to increase public understanding of science and science issues. <http://www.sciserv.org>

International Commission on Mathematical Instruction has a site addressing the role of the history of mathematics in the teaching and learning of mathematics. <http://www.maa.org>

Los Angeles Educational Partnership (LAEP) has a new site providing information about increasing classroom resources. There are interactive lessons, professional development resources, grant information, and a database that can be searched for hands-on material sources. <http://www.lalc.k12.ca.us>

International Technology Education Association (ITEA) is online at <http://www.iteawww.org>
Its focus is the importance of a technologically literate society.

National Science Foundation, online at <http://www.nsf.gov>

National Science Teachers Association (NSTA) has a multitude of resources, programs, publications, and contests. See the web page at <http://www.nsta.org>

National Council of Teachers of Mathematics (NCTM) is beginning a project to revise the standards for teaching mathematics. The web page has more information on the action. <http://www.nctm.org>

US Department of Education Outlines Initiatives on Web Site

The department wide initiatives are listed in a special part of the DOE web site. The address is <http://www.ed.gov/pubs/inits.html>. There is information about Goals 2000, Family Involvement, Standards, Technology, School-to-Work, and other major programs.

NSTA/SESD Convention News

NSTA Conventions

Nationals	April 16-19, 1998	Las Vegas, NV
Eastern Area	Oct. 30-Nov. 1, 1997	Pittsburgh, PA
Western Area	Nov. 20-22, 1997	Denver, CO
Southern Area	Dec. 4-6, 1997	Nashville, TN

Science Education for Students with Disabilities (SESD) Pre-conference

SESD is holding a two day pre-conference at the NSTA national meetings in Las Vegas. The goals are to provide participants with resources on agencies and services that can help meet the needs of students with disabilities, to allow participants to experience model lessons that include accommodations, and to share information on the best practice relating to inclusive instruction in science education. Participants will receive a kit of hands-on materials and will receive a \$100 honorarium. There is a limit of 30 people. Further information and application materials are attached to this newsletter. Hurry! The application deadline is December 15, 1997.

Science Education News

Dr. Judith Tamburlin, Assistant Professor, Department of Clinical Laboratory Science and Anatomy and Cell Biology, State University of New York, Buffalo, has developed **educational materials for teaching anatomy to students with visual impairments or learning disabilities**. She has produced a three volume *Tactile Human Anatomy Atlas*, which has been distributed to the Resource Center for the blind/visually impaired in all 50 states. It includes tactile diagrams with both large print and braille labels, and audiotaped commentary. Diagrams include gross and microscopic anatomy. Recently she has begun working on some K-8 teaching materials. Contact Dr. Tamburlin at (716) 829-3630, Fax at (716) 829-3601, or by E-mail at jtamburl@acsu.buffalo.edu.

1998 AETS Conference

A preconference and a conference will be held in Minneapolis, MN on January 8-11, 1998. The preconference will focus on issues in inclusive science education, and the conference will also have many sessions concerning inclusion. You can ask questions of George Davis, conference co-chair, at davisg@mhdl.moorhead.msus.edu, Patricia Simpson, the other conference co-chair, at PSimpson@Tigger.STCLOUD.MSUS.EDU

Toshiba/NSTA ExploraVision Award

The 1997 winners included, in grades 7-9, from The Central School of Science in Anchorage, AK, comes ORACLE, an idea for a serum that stimulates the creation of an optical nerve and an advanced prosthetic contact lens which would cure most forms of blindness; and in grades 10-12, from University School Laboratory High School of Urbana, IL, an Artificial Vision Restoration system, a prosthesis that incorporates smart hydrogels, signal processing hardware, and tissue scaffolding. This too, would cure many forms of blindness. **HURRY!** Toshiba/NSTA ExploraVision Awards, **deadline Feb 3, 1998**. Call 1 (800) EXPLOR9 or visit the web site at <http://www.nsta.org/programs/explaoa.htm> for further information and application materials. For teams of students in grades K-12 who select a technology, or an aspect of technology, explore how it works, and how, when, and why it was invented. The students then describe their projection the technology 20 years into the future. First and second place winners receive a \$5,000 to \$10,000 savings bond and equipment for their school.

Duracell/NSTA Scholarship Competition

One 1997 second place winner developed a compass for blind persons. Ms. Hilde Heremans of Troy, MI, a student of Gene Menton at the Detroit County Day School, invented a compass that works on a magnetic device that converts the needle position (direction indication) to a variable pitch. The competition is open to students in grades 7-12, with a January 14, 1998 deadline. Call 1 888-255-4242, or check the web page (<http://www.nsta.org/programs/97/duracell.htm>) for entry information.

NSTA and New Instructional Materials

NSTA and several other agencies and business have developed a variety of new instructional materials packages. They address such areas as the Science of HIV, Protozoa, Global Environmental Change and Biodiversity, and the Solar System. Consult the NSTA web site listed above.

NABT, the National Association of Biology Teachers, Publications and Materials

NABT also has a variety of educational materials available. Contact them at (800) 406-0755, FAX (703) 471-1134, or by E-Mail at NABTer@aol.com. One recent addition is a cooperative venture with NSF, titled "Encouraging Student Biological Research Through Teacher-Scientist Partnerships."

Eisenhower Program Funding

The House of Representatives has recommended funding the Eisenhower Program at \$310 million dollars, somewhat less than requested by the Clinton administration, and substantially less (\$50 million) than the original request. \$250 million is set aside for professional development of science and math teachers. Contact your congressman.

Some Other Education Funding in the House of Representatives Appropriations Bill

Title I, funded at \$7.7 billion, an increase of \$395 million.

Title VI, Education Block Grants, at \$350 million, up \$40 million.

Special Education (IDEA) State Grants, \$4.1 billion, up \$298 million.

School Technology Programs increased from \$200 million to \$460 million.

Goals 2000 down \$16 million to \$475 million.

ERIC Clearinghouse for Science, Mathematics, and Environmental Education

The ERIC Clearinghouse is part of the Educational Resources Information Center network. It maintains the world's largest database of educational materials. Readers can submit their own publications to be abstracted and added to the database. There is a two sided **form attached to the newsletter**. Please *remember to sign* the form. You can contact Niqui Beckrum, Database Coordinator at (800) 276-0621 or at beckrum.1@osu.edu.

US Department of Education Develops TIMSS Resource Kit

The TIMSS project is part of the Attaining Excellence: A TIMSS Resource Kit. It is designed to help parents, teachers, and administrators apply the findings of the Third International Mathematics and Science Study program. Its goal was to improve math and science education. The kit contains information on the findings, videotapes of classroom math teaching, guides for using the information in group discussion, presentation overheads, checklists, and flyers. There are 5 modules dealing with examining US education, student achievement, teaching, curricula, and assessment. It is estimated that the 5 module set will cost \$120, but each module can be purchased separately. The TIMSS Achieving Excellence module is public domain and can be downloaded and duplicated without cost. Visit the TIMSS web site at <http://www.ed.gov/NCS/timss/>

Colorado Alliance for Science Education offered some excellent guidelines for improved preservice education for teachers. Among those guidelines, articulated by Phil DiStefano, Co-Chair of the Colorado Council of Deans of Education, was that education students should be provided with instruction in legal issues and classroom strategies designed to serve special-needs children in the regular classroom. For more information contact "Science Interface", Colorado Alliance for Science, University of Colorado, Campus Box 456, Boulder, CO 80309-0456.

Education Week "State of the State" Study on US Education

The complete report is available on the Internet at <http://www.edweek.org/qc/intros/overview.htm> You can also obtain a hard copy by calling (800) 356-1834. There is a fee for hard copy. The report addresses several major issues, such as Standards and Assessment, Quality of Teaching, School Climate, Resources, and Student Achievement.

SESD News

The Journal of Science Education for Students With Disabilities has put out a **call for manuscripts**. The specific information and submission information is attached to this newsletter.

SESD is looking for members to assume leadership positions. See the attached information.

Check the mailing label on your newsletter. If you have renewed since March, 1997, your label says "1998". If it says 1997, your dues (\$10 for regular members, \$16 for members overseas, \$5 for student members, \$8 for student members overseas) are due now. Please send a check written to SESD and mail to Dave Bartlett, SESD Treasurer, Old Village School, 405 West Main Street, Northville, MI 48167.

If you wish to read the SESD constitution it will soon be posted on the SESD web page.

If you wish to become a new member of SESD, there is a membership form attached.

SESD publishes a bibliography of articles relevant to teaching science to students with disabilities. For a copy of the most recent edition send \$5 to Janet Davies, 1394 Cavan, Boulder, CO 80303-1604. You can contact her at (303) 666-9312.

WORKING CONFERENCE ON TEACHING SCIENCE TO STUDENTS WITH DISABILITIES

You are invited to apply for a two-day pre-conference program on teaching science to students with disabilities. The program will run from 8:00 AM to 4:30 PM on Tuesday-Wednesday April 14-15, 1998.

Conference participants will be introduced to a training module for teachers and teacher educators designed to improve their knowledge and skills in teaching science to students with disabilities. Disability areas addressed in the workshop will include: a) Deaf and Hard of Hearing b) Visual c) Motor-Orthopedic d) Learning Disabilities e) Cognitive Disabilities, and f) Behavioral Disabilities. The training module is being developed with support from the National Science Foundation.

The goals of the program are:

1. To provide participants with resources on agencies and services which can be utilized to more effectively meet the needs of students with disabilities in the science classroom.
2. To allow participants to experience model lessons with accommodations for students with disabilities.
3. To share information on best practice relating to inclusive instruction in science education.

Participants will each receive a kit of hands-on materials and resources for their professional use, and will develop an action plan for a local follow-up workshop. Participants will receive a honorarium of \$ 100.00 following delivery of the local workshop. The program is limited to 30 participants.

APPLICATION
to Attend a Working Conference on Science
Education for Students with Disabilities
Tuesday-Wednesday, April 14-15, 1998
8:00 AM - 4:30 PM
Las Vegas, Nevada

Please Print

Name _____ Date _____
Institutional Affiliation _____
Address _____
City _____ State _____ Zip Code _____
Telephone WORK () _____ HOME () _____
E-Mail Address _____

Disability Areas of Greatest Interest (please circle):

Hearing Impairments Learning Disabilities Visual Impairments
Motor/Orthopedic Impairments Cognitive Impairments

Statement: Please prepare a statement (maximum of 100 words) indicating why you wish to be included as a participant at the conference.

Confidential Information (Optional):

Race/Ethnicity (please circle):

African American/Black Native American/Alaskan Native
Asian American/Pacific Islander Caucasian/White
Other _____

Please check here if also of Hispanic origin _____

Gender (please circle): Male Female

If you have a disability please indicate: _____

Final Deadline for Applications: December 15, 1997

Send application to:

Greg Stefanich, Director
1998 Working Conference on Teaching Science to Students with Disabilities
Schindler Education Center 618
University of Northern Iowa
Cedar Falls, Iowa 50614-0606

Questions? Call Greg Stefanich at (319) 273-2073, or E-Mail: Stefanich@UNI.EDU

DO NOT SEND THIS FORM TO NSTA

Share Your Ideas With Colleagues Around the World

***Submit your publications to the world's largest education-related database,
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The Educational Resources Information Center (ERIC) is an international resource funded by the U.S. Department of Education. The ERIC database contains over 820,000 records of conference papers, journal articles, books, reports and non-print materials of interest to educators at all levels. Your publications can be among those indexed and described in the database.

Why submit materials to ERJC?

- **Visibility.** Items included in the ERIC database are announced to educators around the world through over 2,000 organizations receiving the abstract journal *Resources in Education (RIE)*; through access to ERIC on CD-ROM at most academic libraries and many local libraries; and through online searches of the database via the Internet or through commercial vendors.
- **Dissemination.** If a reproduction release is provided to the ERIC system, documents included in the database are reproduced on microfiche and distributed to over 900 information centers worldwide. This allows users to review materials on microfiche readers before purchasing paper copies or originals.
- **Retrievability.** This is probably the most important service ERIC can provide to authors in education. The bibliographic descriptions developed by the ERIC system are retrievable by electronic searching of the database. Thousands of users worldwide regularly search the ERIC database to find materials specifically suitable to a particular research agenda, topic, grade level, curriculum, or educational setting. Users who find materials by searching the ERIC database have particular needs and will likely consider obtaining and using items described in the output obtained from a structured search of the database.
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- Submit the completed release along with two copies of the document being submitted. There must be a separate release form for each item submitted. Mail all materials to the attention of Niqui Beckrum at the address indicated.

For further information, contact...

Niqui Beckrum
Database Coordinator
ERIC/CSMEE
1929 Kenny Road
Columbus, OH 43210-1080

1-800-276-0462
(614) 292-6717
(614) 292-0263 (Fax)
beckrum.1@osu.edu (e-mail)



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**Science Education for Students with Disabilities
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**CALL FOR MANUSCRIPTS
JOURNAL OF SCIENCE EDUCATION
FOR STUDENTS WITH DISABILITIES**

MANUSCRIPT GUIDELINES

Unsolicited manuscripts are welcomed. You are encouraged to share views of the status of science for persons with disabilities, effective teaching practices, curricula and exemplary work samples that are student produced. Use APA style, double space with wide margins, and submit two copies of the manuscript (if printed). Contributors may also send manuscripts on floppy disk. Please use either Microsoft Word (Macintosh) (preferred) or WordPerfect 5.1 (IBM).

The cover page should include:

Title
Author
Author's position
Author's address
Date

A running head (abbreviated title that appears on each page
with page number)
A one-paragraph abstract.

BOOK REVIEWS ARE ALSO WELCOMED.

**CONTRIBUTORS WHOSE MANUSCRIPTS ARE CHOSEN FOR
PUBLICATION WILL RECEIVE A COMPLIMENTARY COPY OF
THE ISSUE IN WHICH IT APPEARS.**

Send manuscripts and reviews to:

Dana Caseau and Jim Marshall, Co-Editors
Journal of Science Education for Students with Disabilities
California State University: Fresno
North Maple Avenue
School of Education
Fresno, CA 95740-0002
Tel: 209-278-0239
E-mail: jameson@csufresno.edu

CALL FOR LEADERSHIP

Please check your mailing label to see if it's time to renew your membership in SESD. If you have renewed, your label should say 1998. If not, it's time to rejoin. SESD is eager to involve its members in the work of our organization. Please review the range of leadership opportunities available in SESD and volunteer for appointment to standing committees or temporary task forces. Only members in good standing can serve on the standing committees.

1. Nominations Committee - chaired by President-elect, Judy Egelston-Dodd

Duties:

- a. Solicit through nomination/self-nominate a minimum of three (3) candidates for each office open to election,
- b. Prepare and deliver a ballot with a brief biographical sketch of each candidate to the membership at the Annual Business Meeting at which candidates will be elected,
- c. Tally the secret ballot of the membership, and
- d. Announce the results of the election as the first order of New Business.

2. Membership Committee - chaired by Brett Moulding

Duties:

- a. Prepare and conduct a strategy for recruiting new and renewing members, and
- b. Report at each Annual Business Meeting on membership recruiting efforts.

3. Newsletter Committee - chaired by Secretary, Sami Kahn

Duties:

- a. Prepare and distribute a regularly published newsletter of interest to the membership.

4. Convention Committee - chaired by Laureen Summers

Duties:

- a. Be selected from within the geographical area of the upcoming site for the annual convention of NSTA,
- b. Assist the NSTA Convention Committee chair in making the convention barrier-free and in programming sessions for persons with disabilities appropriately, and

SESD MEMBERSHIP 1998

Science Education for Students with Disabilities

Dues include subscription to the *Good Newsletter*, published semi-annually, information regarding the annual SESD meeting, an annual journal, *Journal of Science Education for Students with Disabilities*, and a member directory.

Please complete and return the following information with your dues:

NAME _____

POSITION _____

DEPARTMENT (if applicable) _____

INSTITUTION _____

TELEPHONE: () _____ E-MAIL: _____

MAILING ADDRESS _____

CITY, STATE, ZIP _____

SAPD dues for 1998 (Dues cover one year of benefits from April 1 to March of the next year)

Regular Members: \$10.00 _____

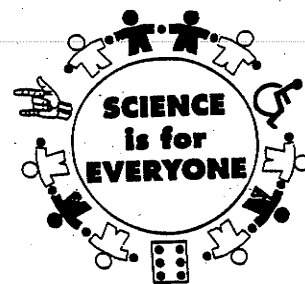
Overseas Members: \$16.00 _____

Student Members: \$5.00 _____

Updated Bibliography: \$5.00 _____

Overseas Members: \$8.00 _____

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Science Education for
Students With Disabilities

SESD

Send to: Science Education for Students with Disabilities (SESD)

David Bartlett, SESD Treasurer

Old Village School

405 West Main Street

Northville, MI 48167