

# SCIENCE FOR THE HANDICAPPED ASSOCIATION (SHA) GOOD NEWSLETTER

A Forum For Educators of Science For Students with Disabilities

Newsletter Number 44

January, 1989

## Goodbye . . . and Hello!

Well, here it is, the beginning of a new year, and now we have a newsletter to usher in 1989! The past year has been a year of change for the Science for the Handicapped Association; in addition to the "normal" changes in the President's chair, a "not-so-normal" change has occurred...the original and only Secretary-Treasurer-Newsletter editor has decided that the time has come to move on to new ventures. Ben Thompson, our Secretary-Treasurer since the beginning of SHA time, has passed the reins of writership over to yours truly, Bob Gotwals. 1988 has been a time of transition...moving files and memberships from one computer to another, working on new designs for the newsletter, beginning to understand everything that this position requires (now I'm beginning to understand the semi-hysterical laughing coming from Ben at the last meeting, when the change became official!). To paraphrase Woodrow Wilson (on his becoming President): "The office of [SHA Secretary-Treasurer] requires the constitution of an athlete, the patience of a mother, the endurance of an early Christian."

In all seriousness, however, it is difficult to describe to the general readership of the SHA Good Newsletter the amount of work that goes into this organization, almost all of it "behind the scenes". The organization receives a substantial amount of mail from individuals and organizations from all parts of the globe, seeking and dispensing information on the teaching of science to disabled students. Prior to becoming Secretary-Treasurer, my only contacts with the SHA were at the annual meeting and from the newsletter. Little did I realize the amount of activity happening on a daily basis, most of it in the form of inquiries of one type or another.

So, it is with great sadness that we say "Fair winds and following seas" to that most venerable of editors, Ben Thompson. His are large shoes to fill. It is my hope that his retirement will bring him nothing but the peace and happiness he deserves. It is also with great humility that I take on the responsibility of serving as your Secretary/Treasurer/Editor. I am most eager for your comments, advice, criticism, etc. It is my pleasure to serve!

### SHA Officers for 1988-1989:

Charles Coble, East Carolina University, President  
✓George Davis, Emporia State University, President-Elect  
Robert R. Gotwals, Blair HS Magnet Program,  
Secretary-Treasurer, Good Newsletter Editor  
9613 Dallas Avenue, Silver Spring, MD 20901

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## A BRIEF HISTORY OF THE SCIENCE FOR THE HANDICAPPED ASSOCIATION (SHA)

In 1972, the National Science Teachers Association, at the request of Ben Thompson, provided a Contributed Papers Session "Science for the Mentally Handicapped" at the 1973 National NSTA Convention in Detroit. Speakers were Dave Brotski, River View School, Manotowoc, Wisconsin; Dr. Lloyd Bennet, Texas Women's College, Denton, Texas; James Humphrey, University of Maryland, College Park, Maryland; and Dorothy Curtis from BSCS in Boulder, Colorado. About 20 people were present to hear from these talks.

There was interest at that meeting to form an organization for the promotion of science teaching for the EMH child, so about 18 people decided to do just that and elected Dave Brotski and Ben Thompson to work on an organizational framework. After the 1974 National NSTA Convention, at which SHA had another Contributed Papers Session, we met and decided to promote science for all handicapped children.

Our organization has grown from 18 in 1973 to almost 1,200 in 1988. The number of presentations at the NSTA National and Area Conventions has also increased each year and today a single Area Convention may easily have the same number of presentations on science for the handicapped as those given at the 1972 National Convention. The number of presentations at the National NSTA Convention has reached 13. Science for the Handicapped Association has been the major promoter of these sessions, and the speakers are usually SHA members.

At the present time, SHA with its constitution and elected officers has several functions:

1. Promotion of science for all handicapped students in our schools.
2. Dissemination of information on science for handicapped students.
3. Promotion and organization of sessions on science for the handicapped at the NSTA Conventions.
4. Publication of a newsletter three times a year.
5. Publication of a bibliography on science for handicapped students.
6. Encouragement and assistance to individuals who ask for help with special needs for handicapped students.
7. Cooperation with agencies and organizations with similar goals.

We are now affiliated with the National Science Teachers Association.

Presidents: (1976) Janet Mansfield (1982) Harry Lang  
(1977) Ken Ricker (1983) Dan Burch  
(1978) Martha Redden (1984) Ian Brindle  
(1979) Judy E. Dodd (1985) Frank Franks  
(1980) Dean Brown (1986) Jeff Himmelstein  
(1981) Anne Swanson (1987, 1988) Charles Coble  
Secretary/ Treasurer: (1989, 1990) George Davis  
(1972-1988) Ben Thompson (1991, 1992) Greg Stefanich

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## WHAT'S HAPPENING IN SEATTLE?

Even though it's only January, it's not too soon to start thinking about the NSTA National Convention. This year's convention is being held April 6-9, 1989 in sunny(?) Seattle, Washington, home of ??? (I'm very much an Eastern Yankee...help me out, you folks in the West!). The Science for the Handicapped Association will be conducting our annual business meeting...we strongly urge all of you to stop by and join us! In addition to this traditional event, various members of SHA will be presenting a variety of workshops and special sessions on teaching science to disabled students. Let's get our colleagues thinking again about the special needs student; encourage them to consider sessions on science and the handicapped! Remind them (and yourselves) that we are an organization not only of the physically-disabled, but also for those with mental handicaps, emotional problems, and learning disabilities. We have the expertise...it needs to be shared with the general population of educators. We would also like to remind you to advise NSTA early if you will need some assistance at the convention (interpreters, etc.).

**HOPE TO SEE YOU IN SEATTLE!**

[See related article: A Letter from the President of SHA, page 8]

# **BEST OF LETTERS TO THE EDITOR**



As Editor, I have the pleasure of receiving a wide variety of letters of inquiry, letters of information, and brochures advertising events and products. It is my hope that newsletter-readers will help me to respond to some of these letters. If you have particular expertise in the topic being discussed in the letter, and/or you live in the vicinity of the letter writer, please extend your assistance. [My area of expertise is deafness and blindness...I have little advice to offer on learning disabilities].

A committee in the Birmingham City Schools System has been formed to develop strategies and activities that can be used by middle school science teachers to aid learning disabled students in their study of science. Please send any information you may have on adapting materials, and information on small programs that have been tried in some local school systems to the address below.

Kandis Scudder, Science Consultant  
124 Chestnut Street  
Birmingham, Alabama 35210

We are in the early stages of developing an Advisory Committee on Disabilities for the Buhl Science Center in Pittsburgh. In my review of information, I found a copy of the "Science for the Handicapped Good Newsletter". I'd be very interested in finding more about your organization.

Kathryn Rudy, MSW  
411 LRDC Bldg., University of Pittsburgh  
3939 O'Hara St.  
Pittsburgh, PA 15260

I have just been hired by the Texas Lions Camp as the Outdoor Environmental Education Supervisor. In going through the files, I have come across several of your fine newsletters [Good going, Ben! - Ed.]. I would like to learn more about your organization. Our camp and our year 'round Outdoor Program both target handicapped populations.

Chris O'Quinn, Outdoor Ed Supervisor  
Texas Lions League  
PO Box 247  
Kerrville, TX 78029-0247

I am a freshman Chemistry/Education major at Rivier College. I am currently doing research on the education of handicapped students, specifically those with Cerebral Palsy. I was hoping that you might be of help. Could you please send me any information that you may have on either the education of handicapped students in general, or on the education of those with Cerebral Palsy? Thank you for your time and consideration.

Kimberly King-Lueders  
Rivier College  
Nashua, NH 03060

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## **Write for the "Science for the Handicapped Association Good Newsletter"!**

Getting requests to write for periodicals is nothing new, right? Most publications, however, have very stringent publication requirements and long backlogs before your article can be published. Not so with the SHA Good Newsletter! As your Editor, I am more than eager for any offerings you can provide. I know from looking at the membership lists the depth and breadth of expertise out there. Let's share the wealth! Submissions can be as short as a paragraph, and as long as several pages. [NOTE: submissions can be downloaded to our new teleconference, SHALINE. Contact your Editor for details].

# RESOURCES !!

## DISABILITY STATISTICS PROGRAM:

The Disability Statistics Program (DSP) is a three-year project to develop and disseminate statistical information on disability in the United States. Funded by the National Institute on Disability and Rehabilitation Research (NIDRR) through Cooperative Agreement number G0087C2014 with the University of California, San Francisco, the program is directed by Mitchell P. LaPlante, Ph.D. and Professor Dorothy P. Rice of the Institute for Health & Aging. Collaborating on project planning and dissemination activities is infoUse, Susan Stoddard, Ph.D., President.

Using national surveys and program data, the Disability Statistics Program will develop, update, and summarize data on aspects of disability in the U.S., including

- o Demography
- o Epidemiology and health status
- o Health care use, costs, and coverage
- o Employment and earnings
- o Social services, benefits, and activity

Statistical data will be disseminated through reports, chart books, journal articles, and the *Disability Statistics Bulletin*. The program will also serve as a resource center for statistical data on disability. The DSP is interested in receiving statistical information on disability that people are willing to share. Correspondence should be directed to Dr. Mitchell P. LaPlante, Director, Disability Statistics Program.

## DISABLED CHILDREN'S COMPUTER GROUP

The Disabled Children's Computer Group is a nationally distinguished information clearinghouse for parents and professionals in every state in the country. The group works towards previewing dozens of pieces of hardware and adaptive technology specifically for use by children. The group can be contacted at 2095 Rose Street, Berkeley, CA 94709 (415) 841-DCCG for more information!

## JOINT EDUCATIONAL SPECIALISTS PROGRAM AT THE UNIVERSITY OF ROCHESTER

The Joint Ed. Specialist Program is a masters degree program jointly sponsored by the Graduate School of Education and Human Development of the University of Rochester and the National Technical Institute for the Deaf of the Rochester Institute of Technology, in upstate New York. The purpose of the program is to provide training in the teaching of hearing-impaired students to persons with a strong background in an academic content area, such as

science. The program was established to recruit more persons into the hearing-impaired teaching profession. Contact Dr. Judy Egleston-Dodd, Program Director, at the University of Rochester for more information.

## NSF FUNDS DESIGN COMPETITION

A new national high school engineering design competition has been funded for two pilot years in five states by the National Science Foundation. The Junior Engineering Technical Society, the National Society of Professional Engineers, and the National Talent Network are jointly sponsoring the program with NSF's \$100,000 grant.

The objective of the competition is to have students apply their knowledge to the production of a working model of a real product which will solve a pre-designated problem. A key feature of the program will be the assignment of an engineer to work with students after they have submitted their initial project. Students and their engineering mentors will study their entry and use it as a vehicle for learning about engineering principles.

[Editors Note: I wonder if a possible "pre-designated" problem might be the design of some adaptive device that uses technology to assist a disabled student in a science lab!]

## BROWN DISC ANNOUNCES FLOPPY DISCS FOR THE BLIND

Brown Disc Company has designed labels for discs and packaging that enable a blind person to read the contents of the package and the description of the discs in braille. The use of the latest generation of computers brings with it the problem of ensuring that the proper medium is used with each personal computer. Brown Disc has now solved that problem for those users with impaired vision who are familiar with braille. A catalog of such supplies is available from Federal Office Supply, Inc., Investment Building, 1511 K Street NW, Suite 835, Washington, DC 20005, (202) 393-0110.

## RESOURCE LIST FROM THE VOLUNTEERS FOR THE VISUALLY HANDICAPPED

Your Editor recently received a new "Resource List for Assistive Computer Equipment for Visually Impaired Persons". This list contains the names of organizations and contact persons who can provide you with detailed information on a wide variety of adaptive computer devices. Contact Volunteers for the Visually Handicapped, 4405 East-West Highway, Suite T09B, Bethesda, MD 20814 (301) 652-4347 for your copy. [Editors Note: this list will also be posted on the new SHALINE Conference, available through the NSTA Bulletin Board System]

# MORE RESOURCES!!

## NEW CATALOG: COMMUNICATION AIDS FOR CHILDREN AND ADULTS

This catalog lists a wide range of materials, toys, books, etc. to assist with removing communication barriers. Contact the Crestwood Company, PO Box 04606, Milwaukee, WI 53204-0606 for your personal copy!

## VIDEO TELECONFERENCE ON COMMUNICATION AIDS AND DEVICES

Education TURNKEY Systems, Inc. (TURNKEY) is currently planning a video teleconference on communication aids and assistive devices that can be used in special education programs and can otherwise assist handicapped individuals. Funded under a U.S. Department of Education/Office of Special Education Programs grant, the TURNKEY conference, scheduled for this spring, comes on the heels of the Technology-Related Assistance for Individuals with Disabilities Act signed by the President on August 19, 1988. This Act will fund approximately ten states to identify and evaluate technology needs, provide appropriate devices and services, disseminate information, improve awareness and outreach, and aid community-based organizations.

"New advances in technology are providing, in many cases, the only opportunity for certain handicapped individuals to communicate and lead otherwise productive lives", according to Charles Blaschke, President for TURNKEY. "In a survey which we conducted two years ago, we found a significant interest in these devices and an increase in school purchases for these relatively expensive devices for severely handicapped students. The new Act should leverage additional funds for purchasing these devices in order to provide reasonable accommodations under civil rights legislation."

To be conducted in conjunction with the Software Communications Service (SCS), a fifteen-state consortium housed at the Central Education Network in Chicago, the video teleconference will include a panel discussion followed by video segments of selected communication aids and devices which will be broadcast to public television stations for subsequent broadcast and off-air taping by the individual schools they serve. After the public school staff have a chance to review the video, they will have opportunities to see demonstrations of the actual devices in which they are interested at their local public television agencies. In cooperation with hardware vendors and distributors, some PTV agencies will provide training and support in the use of these devices.

For more information, contact Charles Blaschke, Education TURNKEY Systems, Inc., 256 North Washington Street, Falls Church, VA, 22046, (703) 536-2310.

## ATTENTION ALL STACKHEADS!

Apple Computer is once again making great strides into making computers accessible to disabled users with its newest application software called "HyperCard", developed for the Macintosh family of computers. HyperCard is an application which lacks definition: not a word processor, but capable of processing words; not a database manager, but capable of managing data; not a graphics program, but very capable of doing wonderful things with graphics images.

The basic concept of HyperCard works like this: imagine a "stack" of blank 3X5 index cards. On each card, you can draw pictures, add text (lots of it, some of it hidden until you're ready to see it!), and otherwise put a fair amount of data in a variety of forms. Once you have created your stack of cards, you can sort them in alphabetical order, "link" one card to another based on some characteristic, or sort them quickly to create "animation". On each card you can also have "buttons"; these are small graphics icons that, when you click on them with a mouse, move you to a new card, shuffle the deck, print the cards for you, or whatever you might want them to do.

Although there is no "stackware" yet developed specifically for disabled students (to the best of my knowledge), HyperCard provides us with a powerful tool for easy software development. Students who cannot use a keyboard could easily make use of the mouse to be able to do word processing with HyperCard; the development of a "stack" to enable a student to do this is well within the reach of most computer users.

As an enthusiastic "stackhead", I would welcome the opportunity to hear your ideas for possible stacks for use with our students. Ideas can be exchanged through the new SHALINE BBS as described in this newsletter, or through the more traditional channels. More on HyperCard in later issues!

# LET'S GET ONLINE!

The national office of the National Science Teachers Association in Washington, DC maintains an active on-line electronic bulletin board system (BBS). The purpose of this BBS is to provide members with a convenient method of sending mail to other members. The BBS also has a number of "conferences". A conference is an area that is has been set aside specifically for some "special interest group". NSTA's BBS has conferences for astronomers, IBM PC enthusiasts, and the like. Why not one for those of us interested in science for the handicapped?

Well, there is such a conference now JUST FOR US! The name of the conference is SHALINE [please... any better names for this conference? Seven letters or less!]. You can connect to this conference by first becoming a user of NSTA's BBS, which is painless and free. Alex Mondale, the SYSOP (system operator) for the BBS is in the final stages of publishing a users guide to the BBS. The BBS is very simple to use even without the guide. The hardest part is getting registered. For IBM users, you can easily register by basically saying "YES" to every question the "registrar" asks you. For users of other computers, the biggest change is that you want to say "None" when the registrar asks you if you want graphics.

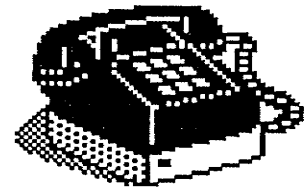
To join our conference, you can use the "J" command (meaing "join") from the Main Menu, followed by the name of our conference (SHALINE). From that point on, you can leave messages for me (Bob Gotwals, SYSOP for the SHALINE conference), or for other users as they join the conference. I also hope to have the SHA Bibliography available to all members in the next couple weeks. For visually-impaired members who use speech synthesizers, the "Good Newsletter" will be available ON-LINE to be downloaded from an ASCII file that can be read by the synthesizer.

## LOGGING ON TO THE NSTA BULLETIN BOARD AND THE "SHALINE"

[[Editor's Note: many of the messages that you will see when you "log on" have been deleted here to save space. I have also taken out most of the the line spacing that normally appears. It is helpful to read the messages as they appear. Alex Mondale's BBS guide will, I am sure, have a full description!]

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ATDT265-4496
CONNECT 1200
WELCOME TO SCIENCE LINE - NODE 2
What is your FIRST name? Kim           [My wife; I'm already registered!]
What is your LAST name? Gotwals
Checking Users...
Name not found
Are you 'KIM GOTWALS' ([Y],N)? Y
What is your CITY and STATE? Silver Spring<MD , MD
KIM GOTWALS from SILVER SPRING, MD
Change name/address, Disconnect, [R]egister? R
Enter PASSWORD you'll use to logon again? .... [Type a SHORT password!]
Re-Enter PASSWORD for Verification (Dots Echo)? ....
Please REMEMBER your password
CAN YOUR TERMINAL DISPLAY LOWER CASE ([Y]/N)? Y
UPPER CASE and lower
Graphics: Three options tailor thes visual output to your PC system:
  [Editor's Note: I have a Macintosh SE, not a PC!]
  None, Ascii graphics, Color graphics
GRAPHICS for text files and menus
Change from N to None, Ascii-IBM, Color-IBM, Help ([ENTER] quits? N
Text GRAPHICS: None
Do you want COLORIZED prompts ([Y],N)? N
Highlighting Off
File transfer protocol: The method you want to use to upload and download.
Ascii — text files only
Batch YMODEM
Press Any Key to continue X
```

Call the SHALINE!



(202) 265-4496

(202) 328-5853

CRC-XMODEM

None — no default  
Xmodem checksum  
Ymodem (1k XMODEM)  
Zmodem batch transfer  
File Transfer type->? X  
PROTOCOL: Xmodem checksum  
TurboKey: act on 1 character command without waiting for [ENTER]  
Want TurboKeys (Y/[N])? N  
TurboKey Off  
Logging KIM GOTWALS

Science Line MAIN MENU

— MAIL — SYSTEM — UTILITIES — ELSEWHERE —

[E]nter a Message [A]nswer Questions [Help (or ?) [\*]ools  
[K]ill a Message [B]ulletins [J]oin Conferences [F]iles  
[P]ersonal Mail [C]omment [V]iew Conferences [G]oodbye  
[R]ead Messages [I]nitial Welcome [X]pert on/off [Q]uit  
[S]can Messages [O]perator Page [U]tilities  
[T]opic of Msgs [W]ho else is on \* = unavailable [\*]Library  
MAIN command <?,A,B,C,E,F,H,I,J,K,O,P,Q,R,S,T,U,V,W,X>? J;SHALINE

[This connects you to the SHALINE Conference]

MEMBER privileges granted in conference SHALINE

Welcome to SHALINE Conference

Checking messages in SHALINE.

Sorry, KIM, NO NEW MAIL for you

SHALINE Conference

MAIN command <?,A,B,C,E,F,H,I,J,K,O,P,Q,R,S,T,U,V,W,X>? r

[This lets you "read" a message!]

Message base SHALINE Conference

Msg # 2-3 (H)elp,(S)ince,(L)ast, (T)o,(F)rom,(M)ine, text, [Q]uit)? 3

Msg #: 3

From: BOB GOTWALS Sent: 12-30-88 21:40

To: ALL Rcvd: -NO-

Re: WELCOME TO THE SHALINE!

WELCOME TO THE SHALINE! This newest conference of the NSTA BBS system has just been established to provide a forum for all members (and nonmembers) of the Science for the Handicapped Association to trade ideas, seek solutions to problems, and generally have a good time. THE SHA, an affiliate of NSTA, is an organization devoted to providing information on the teaching of science to any student with any type of disability, including deafness, blindness, mental retardation, learning disability, whatever. We publish a quarterly newsletter, and are the proud owners of a substantial "lending library" of materials on science for the handicapped. If you want to know something about science and the handicapped, the chances are good to excellent that we know where to look! Membership in our group is a paltry \$5.00 per year. We welcome all to our conference.

More [Y]es,[N]o,[C]ontinuous,[A]bort,[R]eply,[T]hread,=[r]eread,+,-? n

QUIT C)onference, S)ession or to section F)ile, [M]ain, U)til? m

SHALINE Conference

MAIN command <?,A,B,C,E,F,H,I,J,K,O,P,Q,R,S,T,U,V,W,X>? g

["G" means Goodbye!]

End session (Y,[N])? y

Here are some other BBS numbers around the country that may be of interest to you. Some of these require that you are already members of some other telecommunications system. I have not verified all of these boards; some may no longer be in existence!

**RESOURCES: Computer bulletin boards (contact via computer & modem):**

DynamicDuoRBBS — Tony Young, SysOp, 703-425-4506, FidoNet 109/688.

HANDILINE RBBS — Jim Mountain, SysOp, 703-536-2052.

CPCUGMIX — Capital PC User Group Member Information eXchange has a disability conference — 301-480-0350.

EQUAL BBS (a Fido/Fidonet BBS on Computers & the Disabled) (919) 851-6806.

Computer Clinic RBBS (one of only two BBSs in the US that's TDD capable; Arthur Barker, sysop: (919) 834-0649 (in Raleigh, NC).

The Handicapped Educational Exchange (HEX) — 301/593-7033.

Disabled Children's Computer Group BBS (Univ. of CA, Berkeley), (415) 528-DCCG.

HEX (TEX) BBS — 512/383-5860.

National Council of Independent Living BBS — 918/587-4493.

Dr. Ross Shuping's BBS (run by a neurologist working in rehabilitation) — 919/756-3369 (in Greenville, NC).

Capital Telecom-64 — 518/436-1422.

COPH-2 BBS (Comm. on Personal Computers and Handicaps) — 312/286-0608.

PolyFido (Polytechnic of Central London, Computing Centre for the Disabled) — 01-580-1690 (London).

Spine FIDO (spinal cord injury care & research) — 312/908-2583.

FIDO-Racer — 502/762-3140.

St. Joseph's Hospital & Medical Center (a wealth of medical info as well as material on disabilities and message base for the disabled) — 602/235-9653.

Bill Kraski's BBS (info on lost children & on disabilities) — 413/448-8041.

4-Sights Network (Greater Detroit Society for the Blind) — 313/272-7111.

MAILBOX — 612/894-2991.

The Source — Bob Mauro has a column on disabilities.

CompuServe — the Issues Forum has a section devoted to disability (GO ISSUES).

BITNET — has a disability conference.

SPECIALNET — run by Nat'l Assn. of State Directors of Special Education in Washington, DC. Accessible via Telenet.

Contact by voice: Special Education Software Center — 800/327-5892

Center for Special Education Technology (Council for Exceptional Children) — 800/345-TECH (1-4 p.m. ET) (other times, taped message service with 2-3 minute mini-lessons on technology for disabled persons.

**Books:**

PERSONAL COMPUTERS AND SPECIAL NEEDS, Frank Bowe. Berkeley: SYBEX Computer Books, 1984, \$9.95.

PERSONAL COMPUTERS AND THE DISABLED, Peter McWilliams. NY: Doubleday, 1984, \$9.95.

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## ***A LETTER FROM THE PRESIDENT, SCIENCE FOR THE HANDICAPPED***

[EDITORS NOTE: The following is an letter excerpt from President Charles Coble to the NSTA Conventions Committee]

Enclosed is an outline for a proposed NSTA symposium for the annual meeting in Seattle, Washington. The proposed symposium deals with teaching science to handicapped students. The topic is "Anyone Can (And Should) Learn Science." We need a block of time from 8:30 AM to 12:00 noon. On the same day and at the same hotel, George Davis, Chair of the NSTA Committee on Science for the Handicapped is organizing a luncheon speaker for his committee and the Science for the Handicapped Association (SHA). The guest speaker will be a disabled scientist. Immediately following the speaker, SHA will conduct its annual business meeting.

**PROPOSED ACTIVITIES:**

Symposium: Anybody Can (And Should) Learn Science, Dr. Charles Coble, President, SHA, East Carolina University

8:30 - Rationale for Teaching Science to Handicapped Students, Dr. Don Orlich, Washington State University

9:00-10:00 - Secondary/College Science for the Physically Disabled, Dr. David Lunney, East Carolina University and Dr.

George Keller, West Virginia University

10:00- 11:00 - Middle Grades Science for the Physically and Mentally Handicapped, Dr. Floyd Matheis, East Carolina University and Ms. Wende Allen, State Department of Public Instruction, North Carolina

11:00-11:30 - Physically Handicapped and Visually Impaired in the Laboratory, Dr. George Davis, Emporia State University, and Mr. Bob Gotwals, Blair High School, Silver Spring MD

11:30-12:00 - Resources for Teaching Science to the Handicapped, Dr. Ben Thompson, University of Wisconsin Eau Clair, and Dr. Ken Ricker, University of Georgia



# TECHNOLOGY-RELATED ASSISTANCE ACT SIGNED BY PRESIDENT REAGAN

## Act to provide money to states for promotion of technology-related assistance to disabled persons

[EDITOR'S NOTE: This is a direct quote from the September, 1988 THE NEW YORK STATE ADVOCATE FOR THE DISABLED NEWSLETTER. For more information about this.. call the toll-free hotline 1-800 522 4369, or for out of state callers 1 518 473-4538.

### \*\*\*\*\*NEW FEDERAL TECHNOLOGY LAW PROVIDES GRANT MONEY TO STATES\*\*\*\*\*

President Reagan has signed into law the Technology-Related Assistance Act for Individuals With Disabilities of 1988". The measure establishes a program of grants to the states in order to promote technology-related assistance.

The measure will provide up to \$3,500,000 over three years in financial assistance to each state that applies to help develop and implement a consumer-responsive statewide program of technology-related assistance to all people with disabilities. The long-term goal is to find ways to use technology to help people with disabilities by giving them greater control over their lives and allowing them to interact more with non-disabled people.

The statewide programs are designed to increase:

- awareness of the need for assistive technology devices and services and of policies, practices and procedures;
- the availability and knowledge of the effectiveness of technology devices and services;
- the availability of and funding for the provision of assistive devices and services;
- the capability of public and private entities to provide assistance and to pay for it;

- co-ordination among state and other public and private organizations; and
- the probability that all people with disabilities will be able to secure and maintain assistive devices.

The program will also facilitate federal policies, erase payment barriers, and help the federal government assist the states with information, training and funding.

States that receive the a grant may use the funds to identify needs, co-ordinate resources, provide devices, and services, disseminate information, provide training and technical assistance, raise public awareness, assist statewide and community based organizations, support partnerships between public and private sector, compile data and establish procedures to assist people with disabilities to become involved.

Under the terms of the bill, the secretary of education can award three year grants to the states. No more than 10 grants totaling no more than \$9,000,000 will be issued the first year, no more than 20 the second year and any number the third year. Between \$500,000 and \$1,000,000 will be awarded to each qualifying state in each of the first two years and between \$500,000 and \$1,500,000 the third year. The secretary of Education will calculate the amounts based on money available, state population and proposals.

The legislations also charges the National Council on the Handicapped with the conducting of a study and informing the President and Congress about federal and state laws that facilitate or impede the ability of states to implement, financing or payment for technology related programs. The Council must appoint an advisory council and work in co-operation with other federal agencies.

The Secretary of Education must also determine whether a national information and program referral network should be established.