



CALIFORNIA
EDUCATIONAL
DATA
PROCESSING
ASSOCIATION

THE
DATABUS

"Serving California's Public Education Technologists"

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CEDPA's Theme for the Coming Year

Direction: Partnerships, activity and opportunity to be focused upon.

Phillip W. Branstetter, Riverside County Office of Education

The coming year, perhaps the next few years, will witness continuing metamorphosis in the CEDPA organization focusing our collective energies on opportunities beyond stereotypical "glass house" issues. Specific emphasis will be on partnership linkages with other associations (most notably CUE, CASBO, and CCSESA), continuing attention to statewide initiatives and projects, active participation with California Department of Education activities, and efforts to increase membership two dimensionally—both in the area of traditional data processing participants and extending to instructional support staff.

This is the era of communications and networking. We are simultaneously barraged with the promise of a "Superhighway" and the reality of California budget constraints. At the same time issues of network infrastructure, telecommunications standards, and a standardized account code structure are on the table. CEDPA has the opportunity and the obligation to become an advocacy group for how those issues should be approached. We have representation on or with virtually all the committees, consortiums, and associations active in the state as well as a wealth of technical knowledge vested in our ranks. Our basic agenda is to actively promote the expertise and experience of our membership to other organizations in a collaborative, supportive, and organized fashion—simultaneously utilizing *The Databus* to document progress and comment on issues. Another opportunity is to utilize more evenly-scheduled SIG meet-

ings as functional forums to develop positions and recommendations for lobbying decision-making bodies. Many of our SIG participants have crossover interests. A strategy being suggested is to host a small number of one-day *mini-conferences* in addition to the fall conference, and oriented towards issues in lieu of SIG meetings based on technology interests or job function.

The Databus editor was distinguished as a permanent Board position as a result of a by-laws change voted upon at the conference. Responsibility for *The Databus* has long been one of most, if not *the* most, challenging assignments on the Board. Addison has shouldered this responsibility during the past two years with unadvertised distinction. During his tenure as Editor production costs have been substantially reduced while the product has

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CEDPA Information

CEDPA is an association of Educational Data Processing Professionals (technologists) within the State of California. Founded in 1960, the major emphasis of the association's activities are directed towards improving Administrative Information Processing in public education within the State of California and to prepare its membership to better meet and support the technological needs of the Instructional Program.

CEDPA is a California non-profit corporation, as recognized by the Internal Revenue Service.

As cited in CEDPA's bylaws, the purpose of this organization shall be:

(a) To provide information to the California public educational community concerning educational data processing via dissemination at an annual conference and through periodicals and special interest seminars.

(b) To foster the exchange of knowledge of educational data processing concepts, systems and experiences between educational data processing installations and other associations both at the state and national level.

(c) To inform the association membership of important information concerning educational data processing.

(d) To provide recommendations to the State Department of Education, State Legislature, school districts, County Offices of Education and other public educational organizations concerning educational data processing.

(e) To develop professional standards for the Educational Information Systems Community within the State of California.

Yearly membership in CEDPA is granted to attendees of the Association's annual conference. Individuals interested in the Association's mailings may request to be added to CEDPA's mailing list by writing to the address below.

The DataBus is published bimonthly by the California Educational Data Processing Association and is distributed without charge to all members of the association and to other selected individuals within the State of California that are interested in information systems processing in education. Correspondence and address changes should be sent to:

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UK/LA Demonstration of the Global Schoolhouse, November 3, 1994

Application: Interactive multimedia learning takes place on the Internet.

Tracy LaQuey Parker, Cisco Systems, Inc.

As part of the "UK-LA '94" festival (a 67 day celebration of British arts, business, education and technology in LA, CA), student ambassadors from Global Schoolhouse Project classrooms in California, Washington DC, England, and Australia participated in a live interactive video-conference over the Internet (using the CU-SeeMe application), which was supposed to include the Prince of Wales. Prince Charles canceled at the last minute, but the children from the UK, LA, DC, and Australia schools went on with the show, explaining how they use the Internet and how it benefits them in their studies. They also got to interact with the President and CEO of Cisco Systems, John Morgridge, who partici-

pated from Cisco headquarters in San Jose, California. At Mr. Morgridge's request, the LA students sang a song they wrote about the Global Schoolhouse Project (sung to the tune, "The Brady Bunch" :-)).

Thousands of people from all over the world observed this historic conference which was broadcast over the Internet via CU-SeeMe reflector sites and the Multicast Backbone (MBONE) as well as listening to it courtesy of a phone conference bridge provided by MCI. For this particular event, Cisco worked with Pacific Bell and CERFnet/General Atomics to establish the Internet con-

(See "CU-SeeMe" on Page 4)



CU-SeeMe

(Continued from Page 3)

nection at the LA hotel. The developers of CU-SeeMe at Cornell University, Sprint and hundreds of other volunteers, also contributed to make the videoconference happen.

This was yet another successful example of how business, education and government organizations are working together to improve the quality of education in schools worldwide. Cisco Systems is proud to be a sponsor of the Global Schoolhouse Project, which is dedicated to demonstrating how internetworking technology and a connection to the Internet can be used to create a worldwide classroom without walls. In the words of John Morgridge, "The information highway eliminates the boundaries of time and place when it comes to access to information and education. In the networked world, the only barrier to entry is the capacity of one's own mind."

Resources/For More Information:

Video Applications

- CU-SeeMe: Available for free via anonymous FTP from gated.cornell.edu in the pub/video directory. See the CU-SeeMe.FAQ.7-6.txt file.
- MBONE: The MBONE Frequently Asked Questions document is available via anonymous FTP from ftp.isi.edu in the mbone directory. See the [faq.txt](#) file.

The Global Schoolhouse Project

Yvonne Marie Andres
Global Schoolhouse/
Global SchoolNet Foundation
7040 Avenida Encinas 104-281
Carlsbad, CA 92009
Voice (619) 931-5934
FAX (619) 931-5934
email: andresy@cerf.net

Cisco Systems Education Program

For information about Cisco internetworking products

Phone: 1-800-EDNTWKS
Email: edu@cisco.com
The Cisco Education Archive (CEARCH)
<http://sunsite.unc.edu/cisco/edu-arch.html>

Tracy LaQuey Parker is Manager, Education Market Development for Cisco Systems, Inc., and the author of many publications including "The Internet Companion Plus". She can be reached at tparker@cisco.com.

CEDPA's Theme

(Continued from Page 1)

improved. Along with ensuring that volunteer writers meet production timelines (no small task with everyone's schedule these days) Addison is also responsible for the fall Conference Announcement and Program printing. This organizational structure change, along with changes in the focus areas of the SIG Chairs, are structural changes to position the Board to be responsive to opportunities.

The coming year is filled with the promise of activity and opportunity. We have begun a dialog with CUE leadership to discuss possible linkages between our two organizations' activities. The CEDPA Board of Directors meeting in December is a planning meeting to discuss issues such as the types of resource sharing and linkages CEDPA should have with other associations, as well as best approaches to leverage CEDPA membership expertise in an advocacy role. I am personally excited about the prospects for CEDPA members and the potential to make an impact on the events to come.

Fall Conference Evaluation

Ken Jones, Lodi Unified School District

The 1994 Conference Speaker Program was a big hit with the attendees. We were very excited and rewarded by the evaluation forms. Thanks to all the attendees who took the time to fill out the forms—it just allows us to do a better job for you next year.

Almost without exception, attendees felt that the keynote speakers and breakout sessions hit the nail on the head for the problems that they are trying to solve today. From the charts on Page 5, it is obvious that the Internet and internetworking are the truly hot topics of today. The Internet Technology Lab was a great idea and many attendees would welcome its return next year. Thanks to Warren Williams for all his hard work in putting that together.

The vendor show was well attended and almost without exception was well appreciated. The hotel and the location of the conference was a high point of the conference. The CEDPA Board also really appreciated the hospitality and flexibility of the hotel staff. We will definitely attempt to return to the Long Beach Sheraton in the future.

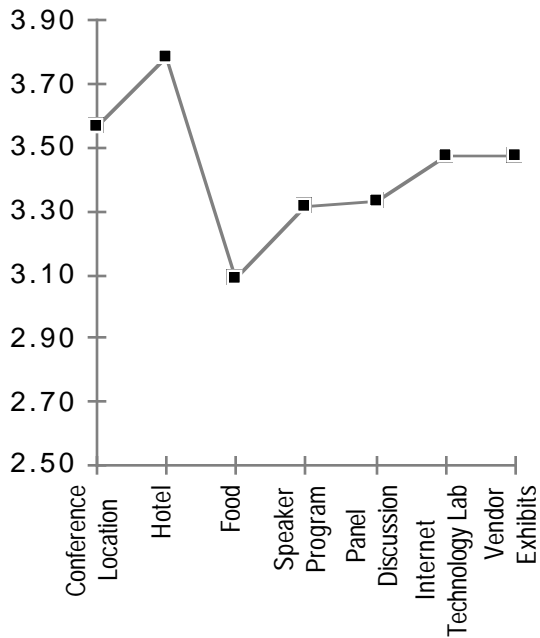


Figure 1. Ratings of various conference criteria

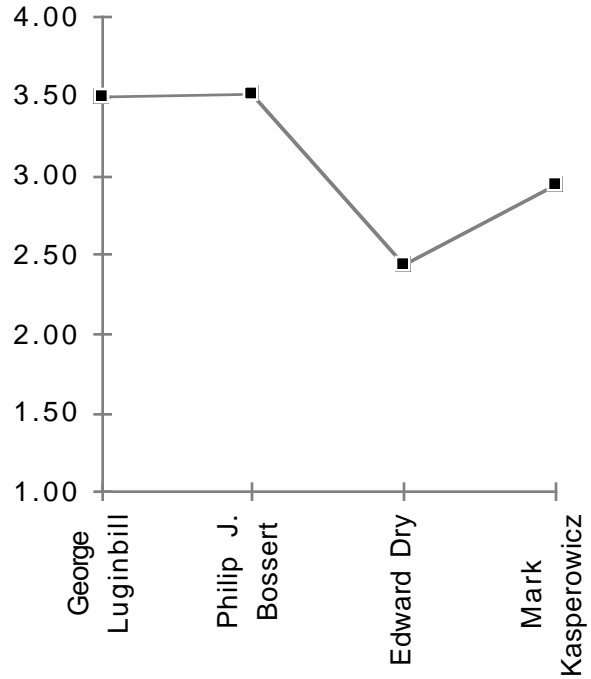


Figure 2. Ratings of main speakers

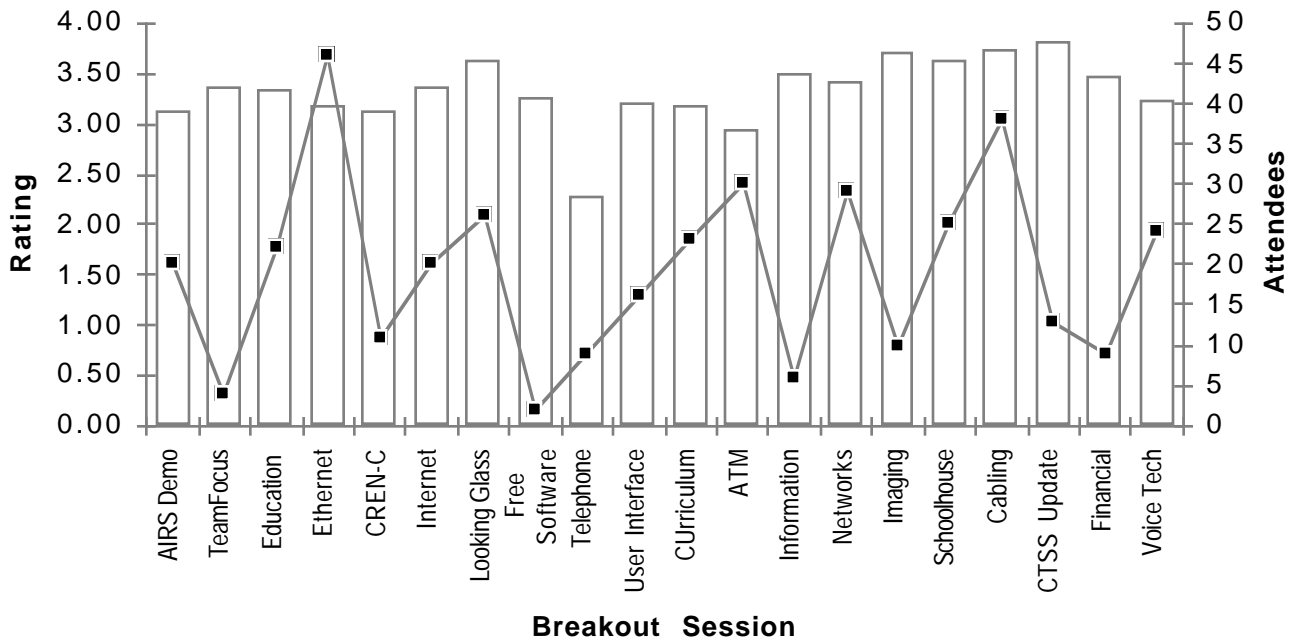


Figure 3. Ratings of breakout sessions

Pacific Bell Receives Approval

Education First: Technology initiative is now Ready for deployment.

Pacific Bell's Education First initiative is now ready for deployment now that the California Public Utilities Commission has addressed the company's application for rehearing and received concerns Pacific Bell had with the commission's initial approval. The initiative offers free linkages for computer communications and video conferencing—the first lane of the superhighway—to each of the nearly 7,400 public K-12 schools, public libraries and community colleges in Pacific Bell's service area.

Education First was announced in February, 1994 by Pacific Telesis Group Chairman, Phil Quigley. "Most California public schools and libraries are at a technological standstill today," said Quigley. "By offering a baseline capability to access information from anywhere in the world and engage in interactive distance learning, we will be providing every school, library and community college an on-ramp to the communications superhighway."

Pacific Bell's offer of free digital service to schools and libraries for data and video applications - telecomputing and interactive telelearning - extends through the end of 1996. The company has asked the CPUC for a similar resolution of support to extend the Education First offer to some 1200 private, nonprofit K-12 schools served by Pacific.

Under the initiative, qualified customers will be provided up to four lines of Integrated Services Digital Network (ISDN). One line will be provided for on-line data communications, or telecomputing, while up to three lines may be used for interactive telelearning using video. In addition, Education First customers will be provided one additional ISDN line if they choose to implement a hub design with a mutually agreed upon hub location.

This type of network configuration is designed to accommodate school districts and other clusters of schools interested in high speed networked access to the Internet.

In addition to the one year of free digital service, Education first customers will be provided inside wiring for up to two locations at each site, as required, to support the telecomputing and interactive telelearning applications.

The first schools to be connected under the Education First Initiative will be a dozen demonstration sites. These sites (schools, libraries, and community colleges located

in rural and urban areas of the state) will serve as telecomputing and interactive learning showcases. In addition, the sites will serve as application development centers for assisting teachers in the integration of information technologies into their respective curricula.

"We're offering schools and libraries valuable services they can use today while extending our commitment to connect them to emerging technology services," said Powell. "In the future, we will provide schools and libraries with access to video-on-demand and other forms of interactive multimedia as we deploy our interactive broadband network across the state."

Education First Application Packages will be sent to District and County Offices of Education Superintendents and Public K-12 school Principals of institutions within Pacific Bell's service area.

Invaluable resources...

Building The Future: K-12 Network Technology Planning Guide

Copies can be purchased by contacting:
Department of Education, Publication Sales 1-800-995-4099

Education First Call Center 1-800-901-2210

The Call Center allows you to:

- Hear the most current information on the Education First initiative
- Receive:
 - Fax-on-demand documents
 - General Information
 - Application Package
- Request information to be mailed to you
- RSVP to workshops and events
- Request live call backs

Education First Components

Pacific Bell Is:

- Providing free digital service for one year supporting telecomputing and interactive telelearning applications.
- Providing up to five ISDN lines per school or library
 - One line for telecomputing (e.g. Internet access)
 - One line if the school or library chooses to use a “hub” architecture to support their telecomputing needs
 - Up to three lines for interactive telelearning (videoconferencing)
- For the Education First ISDN lines:
 - Free ISDN installation
 - No monthly ISDN charges for up to one year
 - Free usage within Pacific Bell’s service area for up to one year
 - Free inside wiring from the telephone closet to the telephone jack for up to two rooms per school or library
- Developing education access rates that will ensure affordable telecommunications connectivity for all schools and libraries in the state.
- Connecting schools and libraries to the Company’s broadband network as it is deployed.
- Providing intra-building wiring at up to two sites at Education First customer locations.
- Contributing \$5 million in “seed money” to organize and support a drive to raise the funds needed to wire every classroom in the state for full broadband capability.
- Spearheading, through Pacific Bell President Phil Quigley, a public/private consortium to ensure that every California classroom and library is wired and equipped for full access to the communications superhighway by the year 2000.
- Expanding its partnership with the Detwiler Foundation for placing donated computers in the schools.

- To donate computers, please call 800-939-6000

- To receive computers, please call 619-456-9045

- E-mail address:
ddetwiler@electriciti.com.internet

- Fielding dedicated resource teams to work with schools and libraries to help them fully utilize their new telecommunications opportunities.
- Supporting a Customer Advisory Panel to work on issues such as staff development, teacher training, technical support, and funding and program coordination.
- Negotiating with vendors to achieve substantial hardware discounts for schools.

Schools or Libraries Will Need to Provide:

- For Telecomputing
 - Computers, associated applications software and communications software
 - Bridges/routers
 - ISDN NT1s (Network Termination equipment) and power supplies
 - Terminal Adapters
 - File Servers (optional)
 - Connectors
 - Inside classroom LAN wiring
 - Internet service
- For Interactive Telelearning
 - Videoconferencing equipment
 - Inverse multiplexers
 - ISDN NT1s and power supplies

*Information about Education First was reproduced with permission from Pacific Bell's Pacific*Bell Education First newsletter for November/December, 1994. Additional information can be obtained from the following sources:*

- Education First Call Center: 1-800-901-2210
- Education First e-mail: education@pacbell.com
- Pacific Bell Internet Gopher: gopher.pacbell.com
- Pacific Bell On-line Bulletin Board (501) 277-1037 or 1-800-336-1037

1994 CEDPA Conference Recap

Conference: Long Beach event well received by attendees.

Phillip W. Branstetter, Riverside County Office of Education

The 1994 CEDPA Conference in Long Beach again focused on Internet, networking, statewide issues, and emerging technologies. Conference attendance and vendor participation were both up from the 1993 San Jose Conference, and the early response from participants during and after the conference indicates the program was well received. The Long Beach Sheraton was a fine setting and an excellent facility. The support we received from the Sheraton Hotel staff was outstanding—they provided the kind of behind the scenes support that often goes unnoticed but means a great deal to the success of the event.

Highlighting this year's event was the "Internet Room" where members got hands-on experience with the "National Superhighway." Warren Williams was responsible for putting together a practical laboratory environment for Internet access and the results were superb. Working with Farley Stewart and Internet Products, Inc. a T1 line was brought into the hotel solely for the purposes of the conference. Both Macintosh and PC workstations were utilized with GINA, Mosaic, and Gopher software. Also on display were a video server and an Internet gateway server for demonstration purposes as well as basic wiring and connection hardware to make the Internet Room's LAN work.

The speaker program was both diverse and very strong with contributing speakers coming from as far away as Hawaii to present at our conference. Particularly notable were the keynote address George Luginbill's "Merging Technology with Education" and Phil Bossert's lunch time discussion of Hawaii's educational network implementation. Overall Ken Jones did a great job in pulling the speaker program together and making this a strong conference.

Finally, the vendor exhibit program (chaired by Skip Sharp) was among the largest CEDPA has put on. We had a number of new vendors, particularly in the networking and Internet service providing business, that augmented the speaker program very well. Already several of the vendors have responded with interest about next year's conference so we have an indication of the importance vendors place on access to the CEDPA membership and the success of the vendor show from their perspective.

Next year the conference will again be in San Jose. Conference planning will begin early in the 1995 calendar year. If you have any suggestions or comments about the conference please let any of the Board members know. We want to increase conference participation and your thoughts and impressions are important. Thank you for your participation and support, and for the work so many put into making this year's conference the success it was.

1995 CEDPA Board of Directors Announced

At the Fall CEDPA Conference, the following Association officers were elected:

President-Elect: Ken Jones (Lodi Unified School District)

Secretary: Jane Kauble (Los Angeles County Office of Education)

Treasurer: Mike Caskey (Stanislaus County Office of Education)

Director (1996): Judy Acosta

Director (1996): Greg Lindner

Skip Sharp was appointed to fill the remaining term of Director Ken Jones. That directorship expires in 1995.

In a separate action, By-Laws changes proposed by the CEDPA board were approved at the conference business meeting. The changes involve adding another elected officer, the *DataBus* editor, to the officers of the Association, and modifying existing By-Laws language that deals with the *number* of officers to correspond to the By-Law that defines the actual association officers. In a follow-up action, Addison Ching was elected to the position of *DataBus* editor. Kathleen Barfield was subsequently appointed by the Board to fill the remaining term of the directorship previously held by Addison. This directorship expires in 1995.

The complete slate of Association officers, along with contact information, always appears as the second page of *The DataBus*.

A Memo from Dr. Philip J. Bossert

Editor's Note: Dr. Philip J. Bossert, President of Strategic Information Solutions, Inc., of Honolulu, Hawaii, was one of the featured speakers at CEDPA's fall conference. Dr. Bossert talked about his involvement in designing and implementing the Hawaii Education and Research Network (HERN) that connects educational institutions statewide. The numerous requests for additional information and copies of his overhead transparencies reflect the popularity of his presentation.

TO: CEDPA '94 Conference Participants
FR: Dr. Philip J. Bossert, President
DT: October 25, 1994
RE: Presentation Slides & Assistance

I enjoyed having the opportunity to meet with you at the 1994 CEDPA Annual Meeting in Long Beach last week. I found the presentations and conversations very informative during the three days, and I am very glad that I decided to stay for the entire event.

Many of you asked for copies of the transparencies that I used during my presentation on the Hawaii Education & Research Network (HERN) and several of you wanted copies of the "Student Blooper World History" that I read portions of at the beginning of my talk. The good folks over at Ascom Timeplex who sponsored my trip to the conference have generously agreed to make copies of both and mail them out from their offices in Irvine along with additional information on the DEC ChannelWorks RF modems and Ascom Timeplex routers which make the Hawaii DOE's ethernet-over-cable networking possible. Since the Hawaii ethernet-over-cable installation is the first of its kind in the nation, the engineers and systems analysts from Ascom Timeplex, Digital Equipment Corp., and Time Warner's local affiliate in Hawaii, Oceanic Cable, have been working closely with the Hawaii DOE Network Services Branch to solve the problems inherent in new technology implementations such as this. It is a good team and an exciting project, so give Kimberley Bone at Ascom Timeplex a call if you are interested in investigating this avenue of telecommunications for your schools.

Also, for those of you who asked if I was available to work with you on technology plans for your schools and districts, the answer is yes. My own area of consulting is focused on strategic technology planning for information and telecommunication systems, but other principals on the Strategic Information Solutions (SIS) team are cur-

rently providing planning, design and support in the areas of local & wide area networking, multimedia design and development, ethernet delivery of compressed video, and "smart school" integrated network planning. If SIS can be of assistance to you in any of these areas, give me a call or drop me a note at the number and address above, or send me E-mail at SIS.PCA@Applelink.Apple.Com.

Thanks again for your hospitality, and I hope I will see you again soon either in California or perhaps in Hawaii.

Dr. Bossert can be reached at Strategic Information Solutions, Inc., P.O. Box 37849, Honolulu, HI 96837, phone (808) 537-5523 or fax (808) 524-7211.

Copies of Dr. Bossert's overhead transparencies or his "Student Blooper World History" can be obtained by contacting Kimberley E. Bone, Account Executive, Ascom Timeplex, Inc., 5 Park Plaza, 18th Floor, Irvine, CA 92714, phone (714) 851-2442 or fax (714) 476-1874.

1994 Vendor Show

Skip Sharp
San Diego County Office of Education

The consensus among those vendors and CEDPA members who participated in the 1994 vendor show was that it was a success.

Despite the continuance of an uncertain economic climate, the vendor show presented several excellent opportunities for all involved. For the attendees, there was a wide variety of good product offerings representing possible solutions to a variety of needs. In many instances there was the chance to 'test drive' some very interesting products instead of just reading about them in the 'glossies'. On the other hand, for the vendors, there was the opportunity to meet with many prospective clients in person, to hear firsthand some of the problems and needs in educational and administrative computing, and finally the opportunity to discuss and demonstrate several possible solutions to those needs. Many vendors stated that having the uninterrupted attention of many key decision makers is of particular benefit to them. If there was an

(see "Vendor" on Page 12)

Information Highway or Digital Ditch?

Keith A. Vogt, California Technology Project

Hardly a day goes by without the media bringing us more news about the "Information Superhighway." Proposed mergers between media giants to create this mythical highway seem to be the announcement of the month. Then a few months later the media reports the giants don't like each other after all...no merger. Even the giants in cable, telecommunications, and entertainment are having difficulty building the digital highway. But given time, a giant may find the right David and we'll start enjoying the much hyped Information Superhighway.

I've just returned from the annual Techno-Lemmings trek to the ocean of bits and bytes in Las Vegas. Dozens of vendors (some giants and lots of Davids) are promising the high speed digital highway is a short trip away. This year's COMDEX show (estimated attendance of 190,000 plus) had dozens of vendors promising access to the Internet with a world of information awaiting the touch of your fingers to keyboard. For just \$x a month you can start cruising the Net. In comparison, last year I saw just two vendors providing Internet access...obviously, a hot market for business.

While I have been a strong advocate of using the Internet to provide educators, students, and parents access to the mushrooming electronic library, I do have some concerns about the rush for schools to "get connected." I travel the state and hear numerous educators exclaim, "We got our 56kb (or T1) line connected to the net. We're ready to go." I ask them, "How many users can you support with that line and what's your plan for growth? What about staff development, overhead costs? Do you have an Acceptable Use Policy?" Many times the reply is silence or, "Uh, I don't know. We'll figure it out later."

When building a new home, office, or school, we plan for the number of phones, electrical outlets, and light fixtures we need and what kind of equipment and support it will take for the number of users we anticipate. The same kind of detailed planning is necessary for accessing the Internet: a well-designed plan that describes the educational foundations for connecting to the Internet; the necessary staff development support; technical training; long-term technical upgrades; an analysis of building one's own network or purchasing it from a vendor(s); and the costs relating to these issues.

I have seen very little long-term planning by educational institutions on the development and expansion of

the telecommunication infrastructure and the costs associated with that development. Somehow we've succumbed to the hype and we've come to believe the Information Superhighway is going to be California schools' freeway to success. Various technical plans (primarily limited to hardwired connections) have been presented as guides to connecting to the Internet, but none has addressed the other options (cable, satellite or wireless) or the *total costs* of implementing such a plan statewide.

I think it's time to visit a rest stop and find a map (or create one) to make sure we're on the right road. It certainly won't be a free-way, regardless how many protest to the contrary. Do we have free phones, electricity, or gas (or textbooks)? Some way, somehow, we will all pay. If we don't prepare a well designed and thorough map for education's telecommunication future, our expectation of educators and kids in schools traveling the Information Superhighway may end either in gridlock or find us in the digital ditch.

Keith A. Vogt is Director of the California Technology Project. He can be reached at P.O. Box 9050, Costa Mesa, CA 92628, phone (714) 966-4268, or on the Internet at kvogt@ctp.org.

CEDPA Is Now On The World Wide Web

CEDPA now has a "home page" on the World Wide Web. This home page includes introductory information about CEDPA as well as links to the current board of directors and contact information.

Beginning with the 1994 Conference Edition, *The DataBus* is also available electronically on the Web. All feature articles and illustrations will be available for on-line review.

To access CEDPA's Web pages, you will need a Web browser such as Mosaic, Cello, Lynx or Netscape. Web browsing capability will soon be available within GINA as well. The URL of CEDPA's home page is <http://www.nmusd.k12.ca.us/cedpa/cedpa.html>. If name resolution cannot be made, connect directly to <http://198.188.8.6/cedpa/cedpa.html>.

The W³ URL is HTTP://www.nmusd.k12.ca.us

Abbreviations: Internet shorthand opens a new world of terminology.

Addison Ching, Newport-Mesa Unified School District

The journey through cyberspace is wrought with new acronyms, abbreviations and terminology unlike anything we've seen before. Terms like SMTP, FAQ, Gopher, PING, WWW, URL, HTTP and HTML have been introduced into our technology environment and we are expected to react as if these are as familiar to us as the back of our hand!

At the CEDPA conference, I indicated to some of you that I would address some of these new terms in this column. You'll undoubtedly encounter more of these "alien" terms as you traverse the information highway.

SMTP is an abbreviation for *Simple Mail Transport Protocol*, the process that the Internet uses to move E-mail to and from its destinations.

FAQ stands for *Frequently Asked Questions*. You'll find many of these documents in newsgroup postings, and generally anywhere in the Internet. These FAQs are perpetual documents and are constantly added to by many different contributors on the Internet.

Gopher was described in a previous issue of the *DataBus*. The Gopher is resource retrieval protocol comprising both server and client components. The client hooks up to a Gopher server to access Internet resources through point-and-click menu options.

PING does what it sounds like—it "taps" the destination address on the shoulder and waits for a response. PING stands for *Packet InterNet Groper* and is used to find out if your Internet client is able communicate with other computers on the Internet. It is the Internet equivalent of "Testing, 1, 2, 3..."

WWW or **W³** are abbreviations for the *World Wide Web*. The Web is yet another Internet resource retrieval mechanism. Like Gopher, the Web requires both server and client (Web Browser) components to function. While Gopher is more menu oriented, Web interfaces are more graphical and multimedia-oriented and may involve sound, full motion video, text and pictures in any combination.

URL stands for *Uniform Resource Locator*. It is a standard format for specifying both the type of Internet resource and its location and is of the form **resource-type://[Internet Address]**. For example the URL for the Newport-Mesa Gopher server is `gopher://`

`gopher.nmusd.k12.ca.us`.

HTTP stands for *HyperText Text Page* and represents the way information on the World Wide Web is organized. Every screen of Web data is composed in hypertext format and is used to describe a "text page" of information. The first page of information at a Web site is called the "**home page**" and usually provides information about and how to navigate the Web site.

HTML is the specific syntax used to compose HTTPs on Web sites. *HyperText Markup Language* is free-form text that includes imbedded syntax commands and URLs to control what data is displayed, how it appears on the screen, and how it is accessed. The URLs can specify information located on *any computer* on the Internet!

Newport-Mesa is now a Web site. A World Wide Web server has been installed using the MacHTTP server software for the Macintosh. The Web server runs on the same computer as Newport-Mesa's Gopher Server but uses totally independent resources (HTTPs) to display its data. This Web site hosts a large collection of educational resources on the Web, all different from those referenced by the Gopher server. In fact, the Gopher is one of the options on the Web. If you have a Web Browser (Mosaic from NCSA is the most popular, but other browsers such as Lynx (DOS-based) or Netscape can also be used. If you don't have browsing software, you can download Mosaic or Netscape from Newport-Mesa's Gopher hole at `gopher.nmusd.k12.ca.us` (198.188.8.6 port 70). If you have Web browsing capability, you can reach Newport-Mesa's Web site at `www.nmusd.k12.ca.us` (198.188.8.6 port 80).

CEDPA's Mailing Address Changes

The mailing address for CEDPA has been changed. All correspondence to the Association should be directed to CEDPA at P.O. Box 6552, Huntington Beach, CA 92615-6552. Please send all correspondence, articles and change of address notices to this address.

Vendor

(Continued from Page 8)

unwritten theme to the conference this year, it seemed to be a genuine spirit and commitment toward mutual problem solving.

We received a great deal of support from the vendors in helping to meet conference needs, including sponsoring meals and providing conference amenities. Hewlett-Packard, Panduit, Cisco and Precision Data were particularly helpful in this area. Augmenting the conference were the outstanding hospitality suites conducted by both Scantron and NCS. The culmination of the show was the drawing for an excellent array of door prizes provided by many of the vendors including Digital Networks, Data Blocks and the California Department of Education. The Sheraton hotel, our conference host, donated a free night at the Sheraton as well as brunch. Bennet Kaiser won that prize. Apple Computer and Snap Systems donated some fine connectivity devices and nutrient planning software respectively. General DataComm donated a Quack telephone (won by Russ Brawn) and US Telecomm donated some software to help use with that phone. Both Digitronics

and Scanning System donated television sets and Macro contributed a nice set of binoculars. Sandy Ching was fortunate to walk away with one of the champagne gift baskets, courtesy of CTB McGraw-Hill and McGraw-Hill Software. Sehi Computers and Kallen's Computer Products both contributed very nice laser printers, and Bi-Tech donated an equally useful calculator. The duffel bag filled with goodies that Ascom-Timeplex contributed could have also been used to help hold some of the very practical prizes donated by Data Impressions. Undoubtedly the \$50 cash prize that Art Vogtlin won from Zuk and Associates will be put to very good use. Finally the CEDPA Board, in appreciation to our vendors, conducted our own drawing for a free night's stay at the Sheraton. Richard Johnson of IBM was the lucky winner.

The CEDPA board is already refocusing on the conference and the vendor show for next year. As always, we welcome all input from our CEDPA members and the vendor community regarding the show. Our purpose as always remains to make the next show better than the last.

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