



**CALIFORNIA  
EDUCATIONAL  
DATA  
PROCESSING  
ASSOCIATION**

**THE  
DATABUS**

**“Serving California’s Public Education Technologists”**

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## **Desert Sands Unified Nominated for Computerworld Smithsonian Award**

**Honor:** Metropolitan Network recognized in Education and Academia category.

**Dr. George Araya, Desert Sands Unified School District**

Each year the Computerworld Smithsonian Awards Program identifies and honors men and women whose visionary use of information technology produces positive, social, economic and educational change. These innovators, nominated by 100 Chairmen of the nation’s leading Information Technology companies, are accorded a permanent place in history at the Smithsonian Institution’s National Museum of American History.

Mr. George Fisher, Chairman of Eastman Kodak Company, nominated Desert Sands Unified School District’s Metropolitan Area Network for an award in the Education and Academia category. Mr. Fisher nominated Desert Sands’ Network because in his view, it was the year’s very best example of technological innovation.

Desert Sands Metropolitan Area Network written, audio and visual material will become part of the Smithsonian permanent research collection and World Wide Web site, the “Innovation Network” at <http://innovate.si.edu>. The formal presentation of Desert Sands Metropolitan Area Network will take place Tuesday, June 10, 1997, 9 a.m., in the Enid Haupt Garden at the Smithsonian Castle. This ceremony will honor Desert Sands and officially induct its work into the Smithsonian’s Permanent Research Collection.

In addition to the nomination, the Computerworld Smithsonian Awards Program invited DSUSD to send all

material that could best describe the technological innovation. Once the information is received by Computerworld Awards Program, it will be sent to the archives of the National Museum of American History. Copies of the information will be distributed to a three-person panel of experts, leading technologists, prominent educators, and internationally-known leaders from both the public and private sectors. Five finalists will be announced in April. The announcement of the winners at a black-tie dinner at the National building Museum in Washington, D.C., has come to be known as the Academy Awards of the Information Technology Industry. But more important, the event represents an opportunity to

*(See “Desert Sands” on Page 9)*

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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 other selected technologists within the State of California who are interested in information systems processing and technology in education. Submissions, correspondence, and address changes should be sent to the editor at:

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# President's Corner

## "Educating Ourselves for a Change"

Greg Lindner, Yolo County Superintendent of Schools

Has a nice ring to it doesn't it? That is the theme for our upcoming CEDPA Conference in October this year. The conference will be held in Sacramento at the Radisson Hotel October 29, 30 and 31<sup>st</sup>. Once again we will be holding a Golf Tournament on Friday. Due to daylight savings time it will be a 9 hole tournament this year. The Conference promises to hold many new, exciting and educational sessions you won't want to miss.

Speaking of "Educating Ourselves For a Change," there are a number of changes going on in technology that require new skills and knowledge. In our region, one area we really need training on is router configuration and management. Currently we are relying on consultants to install and configure our routers and set up our firewalls. Typically this costs about \$400 to install the router with another \$400-\$1000 to implement a firewall. In larger districts this quickly adds up to a lot of money. In an effort to reduce our costs and increase our service to our districts, we are in the process of setting up training on routers. We are planning to host a 5 day course on "Introduction to Cisco Router Configuration" in March with a follow-up 5 day course in April on "Advanced Cisco Router Configuration." After sending personnel through the training we and our districts will be positioned to install and manage our routers in-house without total reliance on outside vendors, thus significantly reducing our costs and our districts' costs of managing our networks. Details on the training will follow and will be posted on the Internet Technical Academy Home page (<http://www.wested.org/ita>). Currently it appears each class will cost approximately \$1000 if we are able to sign up 24 people. In our county we are planning to utilize CTAP Funds to help offset the cost. Educating ourselves for a change... starts with recognizing that our environments are changing and that we really need to position ourselves to be proactive in order to better serve our clients. We feel training like this will help us position ourselves to bring better service at a lower cost to our districts.

A lot of things are changing very quickly. Recently we just lost our Microsoft Select Agreement - it expired 12/31/96. Fortunately, the State Computer Store is negotiating a new Microsoft Select agreement that will be open to California Government and K12 Education. That contract is expected to be finalized by the end of January.

Additionally, San Diego County is also finalizing a Microsoft Select Agreement that will be open to California K12 Education that may even have better pricing. Check out our home page for further information once we receive it (<http://www.cedpa-k12.org>).

On the telecommunications front, we are all hearing about the new telecommunications rates that are coming out. Problem is details of the reductions are difficult to come by. Fortunately, we have some very timely and useful information in this issue that speaks to that subject and explains the issues and details.

Finally, you have also probably heard a lot about the \$10 million granted to CCSESA for the Statewide Telecommunications plan. This plan, formulated via the CCSESA Telecommunications Task Force under the leadership of Kelly Blanton of Kern County Superintendent of Schools, is moving forward and at a brisk pace. Currently, contact persons at each County office have been identified and are being contacted. More information about this will be placed on the Kern County Superintendent of Schools Home Page. The plan is three phased. Phase one will ensure connectivity from every County Office of Education to the Internet. Phase two will ensure connectivity from every District Office to the County Office and Phase three will ensure connectivity from every school to the District Office. With over 8000 schools in California this is a large task but great progress is being made. Stay tuned for more information on this in the future.

Educating ourselves for a change.... Quite a concept don't you think?!

## Advertising in *The Databus*?

What do you think about advertising in *The DataBus*?

CEDPA's Board of Directors has discussed this issue in great length, and we'd like your feedback on the matter. Several vendors have expressed an interest in placing ads in this newsletter. What do you think? Let any board member know by phone or by e-mail.

# C-T-A-P Spells Opportunity

**Funding:** Legislation-based project provides for technology procurement for California's pupils.

**Mike Caskey, Stanislaus County Office of Education**

What is CTAP, and why is it of Interest to my school site, school district, or county office of education (pick one)? I have heard CTAP referred to as "free money". But I have also heard that "there ain't no free lunch". CTAP does provide opportunity for your school, district, or county office to gain some ground in the pursuit of technology.

The California Technology Assistance Project (CTAP) is essentially a response to Senate Bill 1510 (Morgan-Farr-Quackenbush Technology Act of 1992) which **"has the primary mission of ensuring that the procurement and use of technology is clearly guided by the needs of pupils"**. Based on this bill, the Legislature has provided technology funding (and corresponding guidelines) for the students of California. Please note the word **technology** is used, not the word **computer**. The funding provided by this bill refers to any appropriate technology. Of course, the majority of today's technology involves the use of computers. As is the case with most state funded projects, this project is funded annually and could be dropped by the Legislature at any time.

There are three major components to the CTAP model: Grants for schools (for an individual school or two or more schools that join together) for the purpose of acquiring and using technology; Funding by Region; Funding of centralized services.

The first component is aimed at providing individual schools (or groups of schools) with a means to acquire and implement new technology. Schools qualifying for these grants receive \$25.00 per ADA, but with a minimum grant of \$4,000.00. This allows small schools to receive useful grants.

Regions, as defined by the California County Superintendents Educational Services Association (CCSESA), each receive funding based on student population for the purpose of regional activities geared toward the implementation of technology within that region. Within that broad guideline, each region has the responsibility to activate a region wide governing body, the Regional Coordinating Council (RCC), which is responsible for overseeing those regional activities. Membership of the

RCC may vary from region to region, but typically consists of representatives from County Offices, Districts, Schools, Businesses, and other groups and agencies that are active in California education. The key word in the implementation of this regional operation, and in fact throughout all CTAP related projects, is collaboration.

CTAP also provides funding for Central Services, which refers to projects that have state-wide implications, such as the Internet Technical Academy and the California Instructional Technology Clearinghouse. These projects provide information and training in technology across the state. The Central Services operations and the regional CTAP operations are monitored by the Education Council for Technology in Learning (ECTL) which consists of members from business and education.

The process for schools to apply for grants is relatively simple. The first step requires that a school (or group of schools) simply complete a one page form which indicates an intent to file for a CTAP grant. This Notice of Intent to Participate is filed with their CTAP region office, which is the County Office so designated within the region. The participating schools are divided into six categories based on the size of the school district. Schools are then selected from each of the six categories in a random drawing. Those selected are then invited to submit a completed grant application to the California Department of Education Technology Office. The completed grant applications are then scored and the grants awarded. It is estimated that two-thirds off all those completing a grant application will be awarded grants this year. An additional requirement is that the school must also have completed and filed a Technology Use Plan with the CDE Technology Office.

Just as Regional Coordinating Council membership varies, regional CTAP implementations vary across the state. The RCC decides on the projects to be undertaken by the region, and therefore the distribution of the funds allocated to the region. The regional operation is guided by a regional plan which is reviewed annually by the Educational Council for Technology in Learning. Of special note is the required content of each region plan.

*(See "CTAP" on Page 16)*

# Internet Products Serves Up More Than Sophisticated Technology

**InterGate:** Software offers a viable Internet connectivity solution for many.

**Dan Shahbazi, Internet Products, Inc.**

It is fair to say that the Internet is a dynamic and effective resource that is seen as a necessity in educational curricula. This has created a highly publicized urgency for schools to enter Cyberspace quickly. Concurrent with this is the need to gain the necessary funding for Internet access. The educational community may face a multitude of problems if it begins to react abruptly to this urgency. These problems center around support of an Internet connection. Schools that opt to use multiple vendors to provide the necessary hardware and software may face support nightmares in this arena.

According to Farley Stewart, President of Internet Products, Inc., the ongoing success of his company is based on unique and effective customer support that is paired with the technical sophistication of the InterGate, the nationally awarded turnkey Internet server. There are many companies that provide the services and management tools that assist the educational community in building its own Internet solutions. Although these may be viable options in terms of satisfying a physical connection, they can be problematic in terms of support.

“Internet technology is available to any company that wishes to put forth the energy to develop an Internet solution,” Stewart said. “The difference that keeps our customer referrals high is the level of support that’s behind our solution.”

Scott Bain, System Administrator at KFMB-TV in San Diego said, “The reason we went with an InterGate was the support we get from the company. The product is great, but the difference is in the support experience.”

According to Anthony Frey, Associate Technology Editor at Network Computing magazine, the InterGate fits snugly with the level of support that Stewart said is vital to a turnkey Internet solution. “As a turnkey system, Internet Products’ InterGate is setting a standard,” Frey said. “This is most evident in the advanced set of Hypertext Markup Language (HTML) pages used for system administration, which were the best we’ve seen.”

Stewart said that many companies tout themselves as having a turnkey Internet solution. “The notion of a

turnkey solution,” Stewart said, “is becoming more broadly defined. In my mind turnkey means an all encompassing solution that is easy to manage and highly supported.”

Frey, who authored “How The Latest Internet Servers Are Stacking Up” in the October 15 issue of Network Computing magazine wrote, “We found the ease of use and innovation of Internet Products’ InterGate Internet Server 2.5 made it an exceptional package of which an organization looking to get its feet wet on the Internet can immediately take advantage.”

Internet Products received Network Computing’s Editor’s Choice award for plug-and-play Internet servers in October, competing head-to-head with companies that included Microsoft, Sun Microsystems, IBM and Apple.

## The Build-Your-Own Syndrome

Many vendors are offering “build-your-own” Internet solutions, where one vendor might provide DNS and another provides a Web server, for example. Many schools see this as a cost effective way to gain Internet access. Difficulty and problems arise when a facet of this multi-vendor solution fails. In this situation, which Stewart says is happening quite often, technical administrators must contact multiple vendors to diagnose the system problem.

If an educational organization builds its own solution it will likely need to hire costly contractors to diagnose and fix the problem. When this same organization buys an InterGate Internet server, according to Stewart, it also buys the necessary support. This way, if a problem arises, the solution is literally a phone call away. “With Internet Products the value of a single solution is increased because much of the support given is accomplished remotely and quickly,” he said.

“We are aware of at least 50 schools, districts or COEs in California that have solutions in place with other vendors but are less than satisfied with the level of support being provided,” Stewart said. The outcome to this is additional, unwarranted expenses. “They will either hire the appropriate contractor to fix the problem, or they will replace their current solution with a new one,” Stewart

*(See “InterGate” on Page 6)*

# Upcoming SIG Meetings

**Eric Boutwell**  
**San Francisco Unified School District**

For 1997 we are planning four SIG meetings, two in the North and, two in the South. The first two will have the same theme: **WAN Design Considerations that take into account the new PUC Pricing for K-12 Telecommunications.** Join us and get the latest information about telecommunication pricing based on the California PUC implementation plan of the Telecommunication Act. We encourage you to bring any information you might have to the meetings.

The first meeting will be held in San Jose on Friday, February 21, 1997, 9:30 to 3:00 Hosted by Cisco Systems. The second meeting will be held in Palm Springs on Wednesday, March 26, 1997, 9:30 to 3:00 and hosted by Bay Networks. For more information on these meeting please look for the announcement inserts in this issue of *The DataBus*.

The third meeting is tentatively scheduled for June 12 in Yolo county and the fourth for July 24 in Orange County. We should have more information on these meetings in the next issue of *The DataBus*.

Please come and join us and bring ideas that you would like to discuss in the open agenda portion of the meeting. Hope to see you at one or more of the meetings this year.

## COMING EVENTS

- SIG Meeting (North)  
February 21, 1997  
Cisco Systems Inc., San Jose
- SIG Meeting (South)  
March 27, 1997  
Palm Springs Marquis Hotel
- SIG Meeting (North)  
June 12, 1997  
Yolo County Office of Education
- SIG Meeting (South)  
July 24, 1997  
Orange County Area
- Annual Conference  
October 29-31, 1997  
Radisson Hotel, Sacramento

## Intergate

(Continued from Page 5)

said. "Either way, additional expenses are incurred that were avoidable if proper support was in place at the beginning."

Another obstacle, according to Stewart, can be vendors who offer Internet connection solutions that are different based on configuration and platform needs. He said these vendors will need to establish different support criteria for each system in the field. Internet Products has removed this obstacle by developing a single device that can be used in a multitude of configurations and platforms. The end result is one, globally used product that relies on the same support. This is a unique feature of InterGate, and it is cost effective for the company; the support criteria and service is standardized, which creates a more efficient support channel.

This is why Stewart claims that the success of Internet Products is based on support. "The InterGate is a single device that dissolves the need to use multiple vendors," he said. "Customer feedback continues to acknowledge this."

All InterGates are shipped with a lifetime support contract via email. This means a user may send in support questions and receive answers via email. 90 days of phone support and upgrades are also included, and Internet Products offers one year parts and labor on all InterGates.

This support offer is included with the purchase price of InterGate.

Internet Products offers added support features that 95 percent of InterGate customers purchase. Nearly 100 percent of customers wanting enhanced support will purchase a one year support contract. This is a unique feature that includes phone support, free software upgrades, and next day hardware replacement. "There aren't many companies we're aware that provide free software upgrades with a support contract," said Stewart. "The inclusion of complete software upgrades with extended support contracts makes this support feature a powerful way to eliminate product obsolescence," he added.

For further information about Internet Products or the InterGate, call 888-InterGate (468-3742) or visit the company's Web site at <http://www.ipinc.com>.

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*Dan Shahbazi is Public Relations Manager for Internet Products, Inc., and may be reached by telephone at (619) 576-4100 x 100 or by FAX at (619) 576-4111. His e-mail address is dan@ipinc.com.*

# New Technology Dollars For Schools

**Funding:** Education Technology Grant Program of 1996 provides \$35 Million for Public Schools.

## Jeff Bowser, BAE-Network

On October 23, 1996 the State Allocation Board (SAB) adopted a procedure to distribute \$35,000,000 for technology grants under the Education Technology Grant Program of 1996. Bills AB 1302 and AB 1519 were signed into law and authorize the Public Utilities Commission (PUC) to allocate funds for the purpose of telecommunications development in public schools. This grant may be used for purchase or lease of computer hardware, software and staff development training.

“We have tried to make this grant process as simple as the legislation will allow. This is a wonderful opportunity for schools to obtain technology grant dollars in a non-competitive fashion,” said Kathie Bovard, Associate Management Auditor of the Office of Public School Construction.

These grants will be a boon to small school districts. Each district must designate a single site to benefit from the grant. Unified school districts must choose between seeking funds for a K-8 school or a 9-12 school. After completing a qualifying application each school will receive a \$21,500 matching grant. These grants are non-competitive. Each district that submits a qualifying application will receive funding. Each grant will be accompanied by a \$4,000 staff development grant to be used at that site.

Please note that the district match may include in-kind services, such as teacher labor, the fair market value of donated equipment raised from local sources, or other services outlined in the plan. Financial hardship waivers for the matching requirement can be approved by the State Department of Education. Matching funds are not required for the \$4,000 staff development grants.

The remaining balance of funds, \$6,717,500, will be distributed among qualified applicants based on student enrollment. Unified districts may only use their enrollment for the grade range they choose to apply. For example, a unified school district with a K-12 enrollment of 10,000 students has a K-8 enrollment of 9,000 and has applied for a K-8 school site grant may only use their K-8 enrollment of 9,000 students for their additional funding calculation.

Application packets were mailed the school district superintendents on November 8, 1996. A web site for this program may be found at <http://www.dgs.ca.gov/opsc>. This site contains the application forms and information need to qualify for the funds.

Applications are due in the Office of Public School

	Percent of Funds	Allocation
K - 8 schools	50%	\$ 17,500,000
9 - 12	34%	\$ 11,900,000
Administrative Costs	1%	\$ 350,000
Staff Development Grant funds to CDE	15%	\$ 5,250,000
Total	100%	\$ 35,000,000

Construction (OPSC) by 5:00 p.m., Friday, **February 28, 1997**. If you have any questions regarding this program, please contact Kathie Bovard at (916) 322-0317 (e-mail address: [kbovard@dgs.ca.gov](mailto:kbovard@dgs.ca.gov)) or Michael Willis at (916) 322-9448 (e-mail address: [mwillis@dgs.ca.gov](mailto:mwillis@dgs.ca.gov)).

*Much of this article was contributed by online resources of the FCC, CPUC and the California Department of Education. Sources are quoted in the text of the article.*

### Additional Information Regarding Grant Process

AB 1519 requires that there will be a minimum base funding per schoolsite and additional funding based on the number of pupils enrolled at each schoolsite.

The grant guidelines are as follows: a minimum of 90 percent of the grant amount will be used for wiring classrooms, school libraries, and conference rooms, or the purchase of hardware and software necessary for telecommunications and information services for instructional purposes. Further, AB 1519 requires each applicant school districts and county offices of education to match at least 50 percent of the cost of the technology

(See “Dollars” on Page 11)

# Microsoft News

Elisa Bartell, Microsoft Corporation

## Microsoft Seeks Online-savvy Junior High Students

Calling all "Net Heads." The Microsoft Teen Advisory Board gives teens ages 12 to 14 a chance to wear an online producer's hat and advise Microsoft on interactive concepts, the latest teen trends, and cool web sites. Teenagers participate on the board by meeting regularly in person, or online on the Microsoft Network.

The advisory board collaborates online with members from across the US and Canada. Right now the kids are working together to develop a web page. To apply, kids need prior experience with online services, the Internet, and must have an Email account they check at least once a week. For their involvement over a six-month period, the teens receive a software package and a certificate from Microsoft

For more information please contact the board's director, Katie Frankle Kearney, at 310/449-7367 or at [katief@microsoft.com](mailto:katief@microsoft.com).

## Microsoft K-12 Technology Connection

Designed to be a valuable resource for K-12 technology decision makers, this monthly newsletter provides timely content from a variety of sources such as Microsoft education market managers, outside experts and educators. Topics covered monthly include Internet/Intranet, Networking, Desktop Applications, a Q & A Forum and more. Check out the current edition of the newsletter at <http://www.microsoft.com/education/k12/news/>. Or, have the newsletter delivered to your desktop via email.

**SUBSCRIBE TODAY !!**

The Microsoft K-12 Technology Connection (link to <http://www.microsoft.com/education/feedback/newsltr.htm>).

## Announcing Office97

Announcing availability of Office97!! Office 97 is the new version of the world's best-selling productivity suite, which integrates the ease of intelligent applications with the power of the Web.

Office 97 includes significant new versions of its component applications, including Microsoft Word,

Microsoft Excel, Microsoft Access, the PowerPoint® presentation graphics program and Microsoft Outlook. New in Office 97 is the Microsoft Outlook desktop information manager. Outlook provides a powerful means for users to manage information, track documents and communicate with others. Integrating e-mail, scheduling, contact management, task management and a journal module for tracking documents and events, Outlook operates as the central "hub" of activity for Office 97 users.

New collaboration and communication tools implemented throughout the Office suite help users easily create and share information with others. Users can work on the same spreadsheet simultaneously, store multiple versions of documents in a single file, and manage revisions to documents made by multiple users.

Internet technologies in Office 97 make it simple for users to create hyperlinks, publish content on the Web in HTML or Office file formats, find Office or HTML documents on their organization's network, and even edit Office documents live inside their Web browser.

With approximately 50 percent of the code in Office 97 shared across all the applications, users will be able to take advantage of many new tools, such as the Office Assistant and Office Art in each. The Office Assistant is a new animated help system that unifies online user assistance, lets users ask questions in their own words, and interactively provides suggestions to help users get more out of their software. Office Art is a new set of powerful drawing tools, designed to help users create professional, appealing graphics in all Microsoft Office documents.

If you would like to speak with an Authorized Education Reseller about purchasing Office97 at a substantial discount, please contact Joel Irby at 800/426-9400 x11866 or [a-joeli@microsoft.com](mailto:a-joeli@microsoft.com). For more details on product features, please call Microsoft Inside Sales at 800/426-9400 or check out our web site at <http://www.microsoft.com/office>.

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# CMAS and Technology

**State Contract:** Purchasing alternative provides flexibility for technology acquisitions.

**Mark Richmond, Tulare City Schools**

When I first heard of the California Multiple Award Schedule, I was less than impressed. Given the privilege of buying things the same way the Air Force buys coffee pots didn't seem like that great a deal. The prices I saw from the first dozen vendor catalogs were less than spectacular as well. Just another boondoggle, right?

Maybe. I still think that buying things blindly from a CMAS catalog is not a good idea, but the program has opened up another opportunity for our District. We are having work done now by an excellent company, at a price that saved us money. Tulare City Schools is completing the installation of a District-Wide WAN, with Fiber and Cat-5 LANs at each of our 11 school sites, and 10mbps wireless connections to our District Office and the 'net. A few months ago, it seemed we would never be able to meet our schedule. Here's the some of our case history, and the best news yet about CMAS.

In early '96 we had a WAN plan drawn up by a consultant. We put it out to bid in October, and received bids ranging from \$700k to \$1.1 million. We also received complaints, threats, and whining from several of the bidders involved. Worse yet, several of the bidders seemed to be out of their depth. This is a major project, with all the work to be completed in only a few months. Low bids by companies like "Joe's Video Repair and LAN Service" didn't inspire confidence.

Enter CMAS. The program allows us to negotiate directly with a pre-approved vendor, and contract for the work to be done. That solves the 'low bid syndrome' rather nicely, but what about cost? In early November, we invited 8 major contractors (with CMAS approval) to our site for a walk-through. Instead of a bid, we asked for proposals. Given that our specifications were now well over a year old, we knew there were improvements that could and should be made. Within three weeks, we had 6 proposals back, each one from a company with a genuine track record in jobs of this size. This time, we had the freedom to choose the best one, not necessarily the cheapest. After evaluating the various options, and negotiating some details with our vendor of choice, we accepted a proposal and began work.

Having been used to dealing with whomever was low

bid on a given job, the difference is phenomenal. We are working with professionals, and it's a refreshing change. Every facet of the project is planned and scheduled, and right on track. No surprises! We are installing an up-to-the-minute switched, managed network system instead of the old-style hub and router system we had spec'd, and for about the same money as our previous low bid.

The key here is twofold. First, we were working on a project that was large enough to earn the attention of major players. Second, since we were open in our negotiations up front, each company knew who the competition was, and was likely to make their best efforts at keeping our cost low. The end result has been much more than satisfactory.

CMAS has a limit of \$500,000 per contract that applies to State agencies. Local entities may waive even that limit, if desired. Vendors must have a valid contract with the state for each category of goods or services, and the state gets a fee of 1.21%. For more information about CMAS, try [www.pd.dgs.ca.gov/cmas/howtouse.htm](http://www.pd.dgs.ca.gov/cmas/howtouse.htm).

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*Mark Richmond is District Technology Coordinator for Tulare City Schools. He may be reached by telephone at (209)685-7266 or by e-mail at [markr@lightspeed.net](mailto:markr@lightspeed.net).*

## Desert Sands

*(Continued from Page 1)*

honor and recognize the men and women who are harnessing the power of information technology to benefit mankind.

Every entry into the Permanent Research Collection becomes part of a public recognition campaign to ensure that all nominations receive attention from national and local media, as nationally recognized innovations that are changing our lives in positive ways.

*Dr. George Araya is Technology Coordinator for the Desert Sands Unified School District. He can be reached by e-mail at [george@surf.dsusd.k12.ca.us](mailto:george@surf.dsusd.k12.ca.us).*

# Cisco Systems Announces IP/TV

**Multimedia:** New software multicasts video and audio streams over IP networks.

**Sue Mangiapane, Cisco Systems**

Here is a new product offering from Cisco Systems that may be of interest to many of you.

## Product Overview

Multimedia applications represent a significant new opportunity for leveraging corporate intranets and the Internet. Emerging Internet standards enable audio and video streams to be reliably and effectively transmitted over existing IP internetworks. Cisco Internetwork Operating System (Cisco IOS™) software provides the infrastructure for networked multimedia; Cisco's Internet Protocol TV (IP/TV™), server and client software for Windows PCs, completes the solution. IP/TV was developed by Precept Software, specialists in network video applications based on industry standards.

IP/TV is a client/server application that multicasts live or prerecorded digital video and audio streams to an unlimited number of users over any IP-based local or wide-area network (WAN), including the global Internet. Full-motion video is delivered in a window on the user's PC via existing data networks rather than requiring dedicated video cables, monitors, or video teleconference equipment. IP/TV makes networked audio/video affordable and flexible. By utilizing the low-cost, industry-standard PC platform, IP/TV is ideal for applications such as broadcast TV to the desktop, computer-based training, distance learning, corporate communications, Internet multicast backbone (MBONE) viewing, manufacturing process monitoring, and surveillance systems.

IP/TV delivers real-time video to PCs running Windows 95 or Windows NT. IP/TV works with the Cisco TCP/IP Suite 100 on Windows 95 and most WinSock-compliant TCP/IP stacks with IP multicast support, such as Microsoft's TCP/IP.

## Features at a Glance

- Based on Internet standards (IP multicast, Real-Time Transport Protocol [RTP], and Real-Time Transport Control Protocol [RTCP]) and Windows application programming interfaces (APIs)
- Tailored for existing workgroup, campus, and WANs across the enterprise

- Bandwidth efficient through the use of multicasting whereby one stream of audio/video data is sent to an unlimited number of users
- Bandwidth scalable from 28.8 kbps for audio to 1.5 Mbps for high-quality audio and video
- Codec independent, allowing the application/content to determine the most appropriate compression method
- Optimized for Windows PCs, the most cost-effective and prevalent desktop system

## Benefits

- Real-time digital video and audio distribution over today's IP local area networks (LANs), WANs, and the Internet
- Multicast of live or prerecorded audio/video streams to an unlimited number of users on the corporate intranet
- Powerful, yet easy-to-use Windows-based user interface that lets everyone browse program "listings" and view network video "broadcasts"
- Routable network video streams that provide wide-area accessibility, including distribution over the Internet.
- Standards-based solution that incorporates the Internet Engineering Task Force (IETF) standard RTP and RTCP and IP multicast for reliable and efficient delivery
- Flexible client/server software-only solution eliminates needs for costly add-ons or upgrades
- Unique Slidecast feature permits alternating views of speakers and accompanying presentation materials
- Choice of compression/decompression schemes ensures optimal picture quality based on specific application or network bandwidth availability

*(See "CISCO" on Page 11)*

## Dollars

(Continued from Page 7)

implementation plan submitted to the State Allocation Board. Matching may consist of in-kind services, such as teacher labor, the fair market value of donated equipment raised from local sources, or other services outlined in the plan. Financial hardship waivers for the matching requirement can be approved by the State Department of Education.

### Funding Formula

The grants will be distributed in two forms. The first process allocates minimum base funding that facilitates funding for qualifying applicant districts and county offices of education. The second process provides additional funding based on student enrollment. Grant amounts shall be expended for wiring of and between classrooms, school auditoriums, school libraries, and conference rooms at a schoolsite, or for the purchase of hardware and software necessary to utilize telecommunications and information services for instructional purposes.

### Minimum Base Funding

Each qualifying applicant school district and applicant county office of education that operates community schools is entitled to receive one minimum base funding technology implementation grant of \$21,500. The grant amount is based on one complete instructional setting. The technology implementation grant will be automatically accompanied by a staff development grant of \$4,000 for staff training for the same schoolsite receiving a technology implementation grant.

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*Jeffrey A. Bowser is the Director of Bay Area Educational Network (BAE-Network), an Internet Service Provider for schools and government throughout California. He is former teacher, school site administrator, and district technology coordinator. He may be reached at 510-670-4294 or jbowser@bae-net.net.*

*This article originally appeared in the Alameda County Office of Education Technology Newsletter and is reprinted by permission.*

## Cisco

(Continued from Page 10)

- Codec independent; works with any video for Windows-compatible codec
- Sophisticated monitoring of reception quality provides immediate feedback regarding problems to users

### Product Description

Bringing real-time video broadcasting to Windows users over existing data networks, IP/TV offers a sophisticated client/server application for desktop video broadcasting. Using the IP/TV program guide, customers create "TV channels" and associated programs. IP/TV viewers installed on each desktop Windows PC receive program listings created by the program guide. Users select from the program listing and can even channel surf among currently playing programs. Once a program is selected, the IP/TV Viewer joins the new user to the multicast program stream. It's that easy to set up IP/TV and create your own private digital TV station and viewing audience.

IP/TV's unique new Slidecast feature enables a program originator to switch between views of presenters giving their presentations and views of their actual PC-based demonstration materials. With Slidecast, the IP/TV Server can capture both the presenter being videotaped, such as a CEO delivering a profit-sharing message to employees or a teacher giving a technical seminar, and the slides or overheads from the associated Microsoft PowerPoint (or similar) presentation. Slidecast is also useful in sales demonstrations, software training sessions, and similar applications that require synchronization of audio and PC-based applications. When the presenter wants to illustrate a key point using a slide, the IP/TV server takes the actual PowerPoint slide and puts it directly on the user's screen. The user gains the full impact of the visual material as though in the room, not at the other end of a remote broadcast. No matter how many times the screen switches back and forth between presenter and materials, a single, synchronized audio stream integrates the entire presentation. Slidecast can also be used in automated mode with audio-only in cases where bandwidth is insufficient for video transmission.

For more information on IP/TV, please contact your local Cisco Account Manager.

(See "CISCO" on Page 20)

# BIG Discounts For Telephone and Data Services For Schools

**CPUC:** New rules provide reduced rates for telecommunications services for schools.

**Jeff Bowser, BAE-Network**

On October 25, 1996, the California Public Utilities Commission (CPUC) set new rules that established the California Teleconnect Fund. These rules were created as a result of the Federal Telecommunication Act of 1996 (see *Federal Discounts below for more detail*). This annual \$40 million fund will provide discounts for telephone and advanced telecommunication services (i.g. wide area networking) to school and libraries throughout California. The fund generate its revenue through a 0.41% monthly surcharge on ratepayer telephone bills beginning February 1, 1997.

“These are truly watershed events for educational technology and I hope you [district superintendents] will seize these opportunities as technology becomes part of the fabric of teaching and learning,” Delaine Eastin, State Superintendent of Public Instruction.

How will this affect schools? While exact information on specific discounts is not available Pacific Bell has provided Alameda County Office of Education with the following preliminary information. The program at Pacific Bell is called Discounted Advanced Services (DAS). This program is mandated by the California Public Utilities Commission to reduce specific telecommunication services by 50% on or before February 1, 1997.

Who will qualify for the discounts? The CPUC has included in the rules that only qualifying schools and libraries may receive the discounts. While the mandate does specify “schools,” Pacific Bell has broadened the definition to “public, private, non-profit K-12 educational entities, and libraries eligible for Title III of the Library and Construction Act.” As you can see school district and county offices of education are clearly included in the Pacific Bell definition.

What is included? Telephone or voice services: Measured Rate Business voice lines (a.k.a. 1MB) or regular school telephone lines, PBX trunks, SDS IS Centrex; Data services: Centrex IS[DN], Primary Rate ISDN, Switched 56, T-1, DS-3 (45 Mbps). The author apologizes for the jargon used above however, the most salient discounted services to schools are regular, Centrex, and PBX trunk telephone lines; ISDN services and T-1

data services.

What is not included? At this time measured services such as long distance charges, data circuit miles, and

(See “Telecommunications” on Page 13)

## Discount Advanced Services Program Now Available

**Paul J. Sosa, Pacific Bell**

The California Public Utilities Commission (CPUC) issued an order on October 25, 1996 to implement the Discount Advanced Services Program (DAS). Planned implementation date is February 1, 1997.

Funding for the DAS program will come from the California Teleconnect Fund surcharge of 0.41 percent. The highlights of the CPUC order are:

- 50% discounts on monthly access of 1MB, Centrex, PBX Trunks, ISDN, Switched 56, T-1 and DS-3 service for qualified schools and libraries.
- The discounts apply to both tariff and contract rates.
- Installation charges and features will not be discounted.
- Discounts apply to both existing services and new orders.

The program is designed to accelerate the infusion of useful and usable applications into the classroom to enhance student achievement.

For additional information contact your local Pacific Bell Account team.

*Paul J. Sosa is a System Designs Consultant, Educational Services for Pacific Bell. He can be reached at (213) 975-2287 or by e-mail at pjsosa@pacbell.com.*

# Telecommunications

(Continued from Page 12)

ISDN usage are not included. Further, data services such as Frame Relay, ATM and SMDS are not included. However, it must be noted that Frame Relay services (as well as the others) have two charges: the local circuit

Services	Full Tariff	State Contract	New DAS
1MB-Voice	\$15.05	none	\$9.89
Centrex	\$15.65	\$13.90	\$9.31
Centrex IS	\$31.65	none	\$18.19
PBX Trunks	\$17.59	none	\$11.16
SDS IS	\$24.82	none	\$14.78
PRI-ISDN <sup>1</sup>	\$220.00	none	\$110.00
Switched 56	\$49.73	none	\$27.23
T-1 <sup>2</sup> (1.54 Mbps)	\$350.00	\$180.00	\$90.00
DS-3 (45 Mbps)	\$2700.00	\$1750.00	\$875.00

<sup>1</sup> please note that a one T-1 channel termination must be added to get the full cost or \$110.00+\$90.00 = \$200.00

<sup>2</sup> includes both channel terminations or 2 x \$90.00.

charge (T-1 for example) and the port charge (Frame Relay port, in this example). The local circuit charge will be discounted 50% but not the port charge.

*How much will I save?* Below is a simple chart that compares existing tariff (full price), State of California contract pricing with the new discounted rates. Please note that these prices do not include taxes and surcharges and should only be used for comparative purposes.

**Federal Discounts** On November 7, 1996 the Federal Communications Commission (FCC) received recommendations from the Federal-State Joint Board on Universal Services that were set forth in the Telecommunications Act of 1996. A summary of their findings are as follows: 1) The FCC should establish a pre-discount price for services in a given geographical area, 2) Establish discounts that include an adjustment for schools and libraries that are defined as economically disadvantaged or located in high cost areas.

*All eligible schools and libraries may receive discounts of between 20 and 90 percent on all telecommunications services, Internet access, and internal connections, subject to a \$2.25 billion annual cap.*

*Under the rules of priority, only those schools and*

*libraries that are most economically disadvantaged and had not yet received discounts from the universal service mechanism in the previous year would be granted guaranteed funds, until the cap was reached. Other economically disadvantaged schools and libraries would have second priority for support if additional funds were available at the end of the year. Finally, all other eligible schools and libraries would be granted funding, contingent on availability, after economically disadvantaged schools and libraries had requested funding.*

*Schools and libraries should be allowed maximum flexibility to purchase whatever package of telecommunications services they believe will meet their telecommuni*

(See "Telecommunications" on Page 16)

## Vendor Update

### Terrell Tucker Panama-Buena Vista Union School District

As we look toward the '97 CEDPA Conference, a great deal of interest is building in the vendor community. Several vendors have already confirmed their intent to represent their products at this year's event. Once again, it is our hope to present products and services to span the needs and interests of our members. We hope to have the Internet available at vendor's booths to enable them to more easily show their wares. Vendors have shown a lot of interest in providing tons of great stuff as prizes for attending members.

A long list of vendors has accumulated from the past years' conferences, but we are always looking for new entries. It is always our goal to offer a vendor display to satisfy everyone's interests and answer all of their questions. If you know of a vendor who has expressed interest in our conference or has been beneficial to you or your district, please contact me with a name and phone number. The vendor area should be representative of our members' interests and what better way than for you to share in the selection process. If you know of a vendor you would like to exhibit at this year's conference, please e-mail me at [tt@pbvusd.k12.ca.us](mailto:tt@pbvusd.k12.ca.us) or phone me at (805) 831-8331 ext. 111. I look forward to hearing from you!

# Web Pages That Suck!

**Tutorial:** Online guide shows do's and don't's of web page design.

**Addison Ching, California State University Chancellor's Office**

Many years ago when Aldus Corporation introduced PageMaker for the Macintosh, it forever changed the publishing industry. It brought the ability to produce professional-looking newsletters within the reach of anyone with a Macintosh and LaserWriter. The publishing paradigm of typing masters and running them off on ditto machines was shifted to utilizing the tools of technology—word processing and laser printing.

It also provided the ability for *everyone* to become “lousy” desktop publishers.

I remember one of the first newsletters I produced. Conventional publishing guidelines call for a limited number of different fonts on a printed page to make reading easier and more pleasing to the eye; that first newsletter contained about a dozen different fonts, all mixed and looking rather hideous by today's standards. However, at the time, *I* thought it looked pretty good.

That's the point...while I thought it looked good, in actuality it wasn't, and it probably didn't reach the target audience it was intended for (unless I was publishing for the wastebasket!). The problem was compounded several years later when Aldus released its counterpart application on the Windows platform. Now desktop publishing was within reach of *anyone* who had a computer and a laser printer! PTAs, high school journalism classes, clubs, charitable organizations, municipalities...all pushing out more drivel than anyone could possibly be interested in reading, and most *without* proper writing and publishing skills!

Here we are, a dozen years later. Now this publishing frenzy has been expanded to reach the entire world through this fabulous medium called the Internet. Products such as Adobe's PageMill, Claris' Home Page and Microsoft's Front Page now give the ability for everyone to publish terrible web pages, poorly laid out and full of graphics that take forever to load. Nowhere in the web publishing world is there any mention of required training in graphical design and layout. Everyone has a home page full of Java applets that drive you crazy, large self-serving photos of pet dogs and cats, and endless bits of information that the page creators believe are of interest to the entire world. Who visits these pages anyway? And, if I

happened upon your home page, why would I wait the five minutes it takes your lengthy page, full of non-interlaced GIFs, Java applets, and horrendous colors to load?

## WEB PAGES THAT SUCK!

Actually, this is the name of a website ([www.webpagesthatsuck.com](http://www.webpagesthatsuck.com)) that Vincent Flanders has put up to show would-be web page developers the do's and don'ts of web page design and development. It is a crash course—no, it is actually a well-honed tutorial—in the art of putting together an *effective* web page. The entire course takes about two hours to go through online if you are really serious about absorbing what Flanders has to offer.

Flanders is a webmaster for a Bakersfield Internet Service Provider, Lightspeed.net, and a professional HTML instructor. He has no background in design; Flanders came from the school of hard knocks, making every mistake that he talks about. His web site is always changing, memorializing those sites which he deems to serve as examples of what *not* to do. “It's tough to tell people how to do things right, but they can see what sucks when it's pointed out to them,” Flanders said. Examples he links to come from actual pages on the Internet, from municipalities to commercial websites to personal pages. Some of the examples are suggested by the many who have visited his site. His site received almost 70,000 hits the first month it was online.

The opening page reflects the horror of gaudy, flashing colors and text but gives you an opportunity to link to his “real” home page. His “real” home page states, “The purpose of this web site is to help people design effective and aesthetically pleasing web pages. My methodology is somewhat different — I firmly believe that if a person is exposed to bad web page design they'll be less likely to use these techniques in the pages they create. Luckily, most people commit the same mistakes over and over and over and over — you get the point. By pointing out these mistakes, and being told that they are mistakes, you can avoid them when you design your web pages.”

His tutorial covers major areas such as Design (frames,

*(See “Web Pages” on Page 20)*

# Want FREE Software from Microsoft?

## Microsoft® Communications Tools for Schools

A collection of communications and Internet tools for Windows NT Server 4.0

**FREE\*** with proof of purchase of Windows® NT® Server 4.0

Built for you, the District Technology Coordinator... Microsoft offers the most comprehensive, easy to administer communications solution for Windows NT Server in K-12 Education!

Includes installation, configuration and NT account wizards, School web templates, Email, cross platform extensions, video conference software and more!

*Available exclusively for K-12 Districts and Schools*

Microsoft's Communications Tools for Schools CD-ROM is a collection of communications and Internet tools designed specifically for K-12 education. Communications Tools for Schools works with Windows NT Server 4.0 to provide you with the most cost effective, comprehensive communications package and, best of all, it's easy to administer. Free\* with the purchase of Windows NT Server 4.0, the CD-ROM comes complete with Installation wizards and specially designed user and groups wizards as well. Also included in this comprehensive package is email, Internet publishing and Web Server authoring and management components. Communications Tools for Schools also offers video conferencing capabilities for use over the Internet or within your network.

- *Save days of time in administering accounts, at setup and every year!*

**New Wizards make using and administering Windows NT Server and your electronic mail accounts easier than ever.** In addition to installation wizards, A custom education wizard allows schools to import users lists and automatically setup mail accounts, NT users, groups, and permissions.

- *Easily create content-rich district and school sites!*

**New templates for Front Page make setting up your district or school web site almost automatic.** A complete Front Page education web site template includes wizards and to-do lists for easy customization. This web site includes school announcements, areas for teacher, student, and staff home pages, school news and community information.

**ORDER NOW WHILE SUPPLIES LAST!**

For more information on how to get your FREE\* Communications Tools for Schools CD-ROM and an order form please visit our Web site at <http://www.microsoft.com/education/k12/CTS/>

(800) 582-6014 or Fax (716) 873-0906

\*Must include a proof of purchase of Windows NT Server 4.0 and a shipping and handling charge will apply.

# Telecommunications

(Continued from Page 13)

*cations service needs most effectively and efficiently.*

*The FCC should adopt a rule to provide discounts for Internet access. Internet Service Providers (ISPs) and online service providers that also offer Internet access “rely to a large degree on existing telecommunications carriers for the underlying transport facilities that constitute the Internet’s backbone, as well as for local loop connections to individual Internet servers and users.” ISPs and online service providers are considered non-telecommunications carriers. The discount would apply to basic conduit, i.e., non-content, access from the school or library to the backbone Internet network. This access would include the communications link to the ISP, whether through dial-up access or via a leased line, and the subscription fee paid to the ISP, if applicable. The discount would also apply to electronic mail. [excerpts from the Joint Board Findings [http://www.fcc.gov/ccb/universal\\_service/section10.html](http://www.fcc.gov/ccb/universal_service/section10.html)]*

If approved by the FCC the recommendations will be implemented on May 8, 1997. California expects to receive approximately \$225 million of the \$2.25 billion fund.

### *If adopted, how will the FCC rules affect the CPUC’s?*

It is unknown at this time how the adopted rules will change the existing CPUC rules. Clearly the CPUC wanted to get ahead of the game and define, early, how they intend to implement “advanced telecommunication services” of the Telecommunication Act. However, much of the language in the FCC recommendation parallels the CPUC ruling. The FCC recommendation does include a Internet Service Provider discount that is not included in the present CPUC ruling.

For more information browse the following sites: [goldmine.cde.ca.gov/ftpbranch/retdiv/technology/K-12/telecom](http://goldmine.cde.ca.gov/ftpbranch/retdiv/technology/K-12/telecom), [http://www.fcc.gov/Bureaus/Common\\_Carrier/Reports/decision.html#toc](http://www.fcc.gov/Bureaus/Common_Carrier/Reports/decision.html#toc), and [www.cpuc.ca.gov](http://www.cpuc.ca.gov) or contact Jeff Bowser at 510-670-4294.

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*Jeffrey A. Bowser is the Director of Bay Area Educational Network (BAE-Network), an Internet Service Provider for schools and government throughout California. He is former teacher, school site administrator, and district technology coordinator. He may be reached at 510-670-4294 or [jbowser@bae-net.net](mailto:jbowser@bae-net.net).*

*This article originally appeared in the Alameda County Office of Education Technology Newsletter and is reprinted by permission.*

# CTAP

(Continued from Page 4)

Each region plan must address five distinct components: Staff development; Technical assistance, including hardware acquisition; Information and learning resources; Telecommunications infrastructure; Coordination and funding.

Funding for central services projects is based on review and recommendations from ECTL. Projects such as the Internet Technical Academy are periodically reviewed to determine whether funding is to be continued.

So, where’s the Opportunity? The funding for CTAP is currently in the \$16-\$18 million range, with about \$7+ million earmarked for school grants, and about \$9+ million for regional CTAP operation. Obviously, money is always welcome, and within the guidelines for both the regional operation and the school based grants, it is quite possible that your operation may be the recipient of funding (or partial funding) for the acquisition and/or enhancement of technology. For example, within Stanislaus County, discussions regarding the use of CTAP funds have included the possible funding of firewall and news-feed hardware and software for the Office of Education, which provides Internet access to the districts in the county. Probably a little less obvious is the opportunity to build Technology Use Plans for the schools in your district. It’s difficult to sell School Boards on Technology without having a plan. It’s usually easier to convince administrators to develop plans if they can see the possibility of gaining revenue as the result of those plans. CTAP also provides the opportunity for training of school and district personnel in technology.

Find out about CTAP in your region by contacting your County Office of Education. Get involved in your CTAP Regional Coordinating Council. Make use of available CTAP resources, such as training and support. The Legislature is more likely to continue CTAP funding if the CTAP programs are heavily used, and you might find a new resource for the implementation of technology. CTAP is another way to obtain funding and support for the acquisition and use of technology for the students of California.

Look at the Region 6 CTAP web page at [www.stan-co.k12.ca.us/scoe/iss/ctap6/ctap6.html](http://www.stan-co.k12.ca.us/scoe/iss/ctap6/ctap6.html). Once there, you can select 1997 School Based Educational Technology Grants which has links to other pages with CTAP related information.



## NETWORK MANAGER

### THE POSITION

The Los Angeles County Office of Education (LACOE) is seeking an individual to serve as a Network Manager who, under the direction of the Assistant Director, Integrated Network Systems, plans, directs, organizes, coordinates, and manages a wide variety of telecommunications services in support of the daily operations of the Los Angeles County Office of Education and participating districts. The Network Manager is responsible for the management of the Integrated Classroom/Administrative Network (ICAN), the Network Control Center, the LACOE Local Area Network, real and capital assets, ICAN records center, inventory control, customer service center (HELP DESK/HOT LINE) to develop policies and procedures relative to areas of responsibility.

### IMPORTANT JOB FUNCTIONS

- Responsible for the appropriate, efficient, and cost effective staffing, equipping and management of real and capital assets inventory control.
- Develop policies and procedures relative to the areas of responsibility.
- Administratively manage all contracts, billing, collection and cost recovery activities for network services.
- Direct and participate in the development of budgets for assigned areas of responsibility, monitor adherence to budgets, and prepare budget adjustments modifications as appropriate.
- Direct and participate in the selection, training, and evaluation of subordinate personnel.
- When requested, meet with, counsel, advise, and train office and top district administrators in the area of network services.
- Review the work of subordinate personnel with emphasis on cost effectiveness, resolution of problems in a timely manner and adherence to procedures.
- Schedule, coordinate, and assign personnel as needed to accomplish tasks and goals within established time frames.
- Inform departmental and administrative personnel on how best to utilize the wide area network in an efficient and cost effective manner.
- Develop and implement marketing plans, policies and procedures designed to insure continuing district requests for general and specific network services.
- Provide traffic analysis and cost information relative to contract negotiations for network services.
- Select, obtain, and arrange installation of the wide area network and Local Area Network equipment for the Education Centers, regional access points and participating districts.
- Develop policies and procedures necessary for the effective use of Integrated Classroom/Administrative Network (ICAN) units for which responsible.
- Develop, plan and direct the wide and local network maintenance programs.
- Investigate, evaluate and as appropriate, take corrective action on reported problems in the delivery of service.
- Coordinate training and equipment changes and new installation requirements.
- Provide counsel and advise to staff as to network needs.

### QUALIFICATIONS

*Is knowledgeable of:*

- Principals and techniques of organization, administration, budget preparation, administration, and personnel management.
- Principals of the design, development, implementation and operation of voice and data teleprocessing systems and TCP/IP networking.
- Characteristics, capabilities, and uses of wide area voice and data lines and equipment including multiplexers, routers, channel service units and modems.
- Project management techniques, including work planning, scheduling, measurement and reporting.
- Principles and techniques of employee selection, supervision, training, and performance evaluation.

*Has the ability to:*

- Apply new developments in telecommunications and technology to related network user needs.
- Analyze and evaluate telecommunications problems, plan procedures and requirements of the organization.
- Formulate and express ideas on difficult and highly technical concepts clearly and effectively in written and oral presentations.
- Read, interpret, and apply the information contained in complex technical publications, manuals and document.
- Establish and maintain effective working relationships with others.
- Develop, implement, and administer effective operation policies and procedures.
- Develop long- and short-range plans for telecommunication systems marketing, development, implementation and operations.
- Represent the Los Angeles County Office of Education in a professional manner in presenting the products/services available.

*Minimum qualifications include:* Any combination of the following experience and education that could likely provide the required knowledge and abilities would be qualifying.

**Experience:** Five or more years of progressive, directly related experience that includes the design, development, and implementation of voice and data networks, experience in the analysis and selection of digital voice systems including PBX, key systems, OPX, tielines, and T-1 links utilizing both microwave and terrestrial facilities, integration of local area networks plus two or more years experience in a managerial or supervisory capacity.

**Education:** A Bachelor's degree with major coursework in computer science, physical science, business administration, public administration or a closely related field, from an institution of higher learning accredited by one of the six regional accreditation associations as recognized by the Council on Post-Secondary Accreditation.

### SALARY AND BENEFITS

**Annual Salary:** \$61,176 to \$75,780. **Vacation:** 24 days per year for exempt management employees. **Holidays:** 14 paid holidays per year. **Sick Leave:** Twelve working days of sick leave per year. **Insurance:** Employees are eligible for health and medical, dental, vision, and life insurance. **Retirement:** The office's retirement plan combines the Public Employees Retirement System with Social Security Benefits.

### APPLICATION INFORMATION

Individuals interested in applying for the position of Network Manager may obtain an application and supplemental application from:

Los Angeles County Office of Education, PERSONNEL COMMISSION  
11642 E. Firestone Blvd.. Norwalk, CA 90650  
(310) 803-8567

Completed application packets MUST be received in the Personnel Commission by Friday, February 21, 1997 at 4:00 P.M. POSTMARKS ARE NOT ACCEPTED. All applications are time stamped as they are received.

# ALUM ROCK UNION ELEMENTARY SCHOOL DISTRICT

2930 Gay Avenue

San Jose, California 95127

(4-08) 258-4923 FAX (408) 251-7586

**POSTING NUMBER: 96/97: 86 M**

**(Reannouncement 96/97: 75M)**

## CERTIFICATED MANAGEMENT VACANCY ANNOUNCEMENT JANUARY 10, 1997

- POSITION TITLE:** **DIRECTOR, CURRICULUM/TECHNOLOGY**
- MINIMUM QUALIFICATIONS:**
- Valid California Administrative Credential
  - Master's Degree with appropriate specialization in school organization, leadership, staff development and curriculum
- BRIEF DESCRIPTION OF DUTIES:**
- Reports to Assistant Superintendent, Educational Services; Supervises assigned Coordinator(s), Teachers (as applicable) utilizing a matrix management approach; Responsible for the overall management and coordination of the District's Curriculum development, implementation, and technology integration.
- PERFORMANCE RESPONSIBILITIES:**
- Provides leadership which promotes and supports the implementation of technology infusion of professional development activities at the district and school levels; Coordinates and manages the District Mentor Teacher Program; Coordinates and manages designated curriculum program, and/or departmental assignments; Oversees the alignment of District curriculum with State Frameworks/ Model Curriculum Guides, coordinates the revision of District curriculum guides in assigned areas; Coordinates the ongoing implementation of Curriculum Guides so that all students have equal access to the core curriculum; Directs, supervises and evaluates assigned management, teaching, and classified staff and programs; Maintains effective communication and coordinates program efforts with other district office management staff; Responsible for overall fiscal management for the assigned areas of responsibility; Serves as a resource to principals, district management staff and other staff; Actively seeks grants and community resources/linkages to assist the District to improve and enhance its programs and services; Represents the District at County, State, and Federal levels/activities/committees as appropriate; Assures compliance with Federal, State and local mandates, policies and procedures in assigned areas of responsibility; Provides input in the development of District policies and procedures; Performs other related duties as assigned by Assistant Superintendent of Educational Services.
- DESIRED EXPERIENCE:**
- • Minimum of three (3) years teaching experience in grades K-8
  - • Minimum of three (3) years experience as an administrator
- PERSONAL TRAITS:**
- Broad and in-depth knowledge of effective instructional programs for a culturally and linguistically diverse school population; Broad and in-depth knowledge of technology integration, preferably for IBM/Mac platforms; Ability to development/implement new programs; Skill in communicating effectively through speaking and writing; Ability to work harmoniously and collaboratively; Thoughtful decision-maker who can work with people in soliciting their ideas.
- CONDITIONS OF EMPLOYMENT:**
- Work Year: Twelve Months - 210 required work days
  - Salary Range: **\$61,564 - \$71,025**. Effective date of employment: ASAP
- APPLICATION DEADLINE:**
- Monday, February 10, 1997; 11:30 a.m.** in the Human Resources Department  
Completed application should be directed to: **Dave Downing, Assistant Superintendent, Human Resources**. The letter of application and all supporting documents must indicate the candidate's skills in written communication. A completed application includes:
1. Formal letter of application
  2. Alum Rock School District Certificated Management Application.
  3. Complete resume or vita.
  4. Certification of passing score on CBEST or California certification within the last 39 months (if applicable).
  5. Confidential files and/or letters of reference may be submitted (see directions for filing our management applications).

**The Alum Rock Union Elementary School District does not discriminate in employment or any program on the basis of age, creed, sex, ethnic background, marital status, national origin, or handicap.**

# HAYWARD UNIFIED SCHOOL DISTRICT

24411 Amador Street • P.O. Box 5000, Hayward, California 94549-5000 • (510) 784-2600, Fax (510) 782-7213

## DIRECTOR, INFORMATION SYSTEMS SUPPORT

### THE POSITION

The Hayward Unified School District is announcing an opening for the position of Director of Information Systems Support. This position will serve as the department-level manager of the Information Systems Support Department rendering advice and consultation to District executive-level management and, upon request, to the Board of Education on assigned program areas and serve as acting division manager, as assigned. This position is supervised by the Deputy Superintendent.

### MAJOR RESPONSIBILITIES

Develops goals and objectives of the Information Systems Support Department. Closely monitors management information systems and data processing support services to ensure that Districtwide management information needs are assessed and ranked; that available hardware, software, staff and services are utilized efficiently to fulfill District requirements and that District microcomputer users are supported and trained; recommends hardware purchases, software acquisition/development and the utilization of contract services. Maintains records of payroll -related information of the department, ensuring the proper reporting of time worked and absences; recommends Board policy and interprets policy in the development of procedures for the department. Formulates and administers department budget. Prepares departmental agenda materials and staff reports for Board, council and committee meetings and attends Board meetings, upon request, to present reports and render professional advice. Closely monitors and inspects work of contractors for workmanship and conformance with contractual agreements. Works in cooperation with the Educational Technology Coordinator to provide support for the instructional programs/ curriculum for school sites.

### ABILITIES

Plan, organize and direct the diverse and complex programs of the Information Systems Support Department. Assess needs and determine priorities for implementation. Supervise and direct managerial, supervisory, professional, technical and support personnel. Delegate authority and responsibility. Prepare, review and approve comprehensive analyses and reports. Formulate and administer policies and budgets. Administer contract services.

### THE QUALIFICATIONS

**EDUCATION**—Completion of college-level coursework leading to a bachelor's degree in computer science, management information services, operations research or a closely related field.

**EXPERIENCE**—Two years of managerial-level experience in management information systems. Experience with HP-3000 hardware and Novell software is preferred.

### SALARY AND CONTRACT

The salary range is \$68,932 - \$79,926. This is a twelve-month position.

### BENEFITS

If desired, a health plan may be purchased from several plans offered by the District. Participation in dental and life insurance plans is mandatory.

### SELECTION PROCEDURE

The qualifications of each candidate will be evaluated by a professional recruiting and screening committee. The District will determine those candidates for personal interviews. A second interview will be conducted with selected candidates. If, after the interviews, one or more acceptable finalists are not found, the search will be continued.

### APPLICATION PROCEDURE

All applications will be held in strict confidence and are to be sent to:

Jan Nieberlein, Assistant Superintendent  
Employee Services and Work Environment  
Hayward Unified School District  
P.O. Box 5000  
Hayward, CA 94540-5000  
(510) 784-2695

All papers must be received by February 14, 1997, including:

- the brief standard application form;
- a personal letter of application giving reasons for being interested in this position; and
- a resume including background information, educational experience and achievements, and community and professional involvement.

*We are an Affirmative Action/Equal Opportunity Employer*

# Web Pages

*(Continued from Page 14)*

Java), Content (pages that don't say anything, stale content that hasn't been updated), Graphics (backgrounds, large images, animated images, colors), Text (typo[sic], bad text, too much text, fonts and drop shadows), and Miscellaneous topics (cookies, Meta tags, links, advertising).

You might disagree with some of Flanders' opinions, but sometimes the truth hurts. Take a look at this site. If you get an idea of what Flanders is trying to communicate, you'll definitely be in a position to design and produce more effective web pages. If you're sure that you *know* how to design good web pages, visit the site anyway—you might get a laugh or two by seeing the ridiculous and the obvious.

Did Vincent Flanders memorialize *your* web page?

CEDPA  
P.O. Box 6552  
Huntington Beach, CA 92615-6552

# Cisco

*(Continued from Page 11)*

## CISCO News by E-mail

Anyone who is interested in receiving CISCO Systems product information and news by e-mail can send their e-mail address to me. I am putting together a new distribution list for Cisco product information and news. If you'd like to be added to the list, send me an e-mail message with your name and e-mail address.

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*Sue Mangiapane is Account Manager for Cisco Systems, Inc. She can be reached by telephone at (714) 789-5006, by FAX at (714) 789-5005, or by e-mail at smangiap@cisco.com.*

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