



CEDPA K-12 TECHNOLOGISTS

<http://www.cedpa-k12.org>

DataBus

“Supporting California's Educational Technology Community”

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4CNet Update — Videoconferencing

Network: Upgrades increase reliability and integrity, benefitting K-12 connectivity.

Edwin W. Smith, 4CNet

With the successful completion of providing the California Community Colleges (CCC) with data connections for Internet access, the next logical network enhancement is the addition of videoconferencing services. 4CNet's management and technical staff has considerable experience with providing videoconferencing services to the 23 California State University (CSU) campuses, and are well positioned to extend this capability to the 71 community college districts throughout the state. A total of 106 CCC campuses and 17 administrative centers are expected to have videoconferencing capabilities using the 4CNet network by the end of this calendar year.

In preparation for the addition of videoconferencing over the 4CNet network, the CCC Chancellor's Office issued a Request for Applications (RFA) in May 1997, leading to Butte Community College having been awarded a grant for the design and implementation of a pilot study to test video over the network. The pilot study consisted of testing a combination of both ISDN (Integrated Services Digital Network) and direct 4CNet connections. The pilot study was completed in September 1998 and Butte Community College has since issued a detailed report with findings and recommendations supporting the migration of video services onto 4CNet for the California Community Colleges.

Consequently, 4CNet is in the process of upgrading its entire backbone to accommodate videoconferencing

services and to increase the overall reliability and integrity of the network.

The extension of videoconferencing services to California's community colleges is a further solidification and enhancement of the partnership between the CSU and the CCC systems. As the network grows and expands, the management and staff of 4CNet, principally the Telecommunications Infrastructure Support Services team at the CSU, is committed to serving both educational systems. 4CNet management is confident it can respond appropriately to the needs of each system as programs evolve and priorities change.

For readers interested in further details about 4CNet's

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CEDPA Information

CEDPA is an association of K-12 Technologists. Founded in 1960, the major emphasis of the association's activities are directed towards improving K-12 Technology in public education within the State of California and to prepare its membership to better meet and support the technological needs of Administrative and Instructional Programs.

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 information systems and technologies via dissemination at an annual conference, through quarterly periodicals and special seminars.

(b) To foster the exchange of knowledge of educational information systems and technologies concepts, systems and experiences between local education agencies and other associations both at the state and national level.

(c) To inform the association membership of important information concerning educational information systems and technologies.

(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 information systems and technologies.

(e) To develop professional standards for the educational information systems and technologies 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 or filling out the interest form at CEDPA's website.

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 K-12 education. Submissions, correspondence, and address changes should be sent to the editor at:

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Electronic editions of the *DataBus* and information about CEDPA are available from CEDPA's website at

<http://www.cedpa-k12.org>

President's Corner

Terrell Tucker
Panama Buena-Vista Union School District

The New Year has begun and what an exciting year it should be! With E-rate successes all around us and the cloud of the new century hovering over us, the year will definitely be an interesting one. Our upcoming SIGs will offer a forum to help us solve problems back home and will allow us to share our experiences with other CEDPA folks. The bi-monthly DataBus issues will once again serve as an invaluable source of information, providing each of us the opportunity to learn from others. It is also an excellent vehicle for us to offer tips and solutions to peers who have been struggling with similar problems.

With the New Year comes new problems and challenges. After the success of our Erate and Edtech listservs, CEDPA is now offering a brand new listserv forum. Look for the instructions for subscribing to the CEDPA listservs

(See "President" on Page 10)

CEDPA Listservs

As a service to K-12 Technologists, CEDPA hosts several e-mail discussion distribution forums (listservs) on current topics of interest. These lists are open to anyone with an interest in the topic area.

Edtech - A discussion forum for educational technology issues.

Erate - A discussion forum for E-Rate, the FCC ruling on Universal Service that provides schools and libraries significant discounts on telecommunications services.

SIG - A discussion forum for K-12 information management issues; also used to assist with the planning and announcement of CEDPA SIG meetings.

Y2K - A discussion forum for Y2K-specific issues, problems, and solutions.

To join a distribution list, send an e-mail message to listserv@cedpa-k12.org. Leave the message subject blank. The message body should contain only two words: the word **subscribe** and the name of the discussion list you wish to join. The rest of the message should remain blank. Do not append your signature line or any other text to the message.

To leave a list, send a message to listserv@cedpa-k12.org as above, except use the words **unsubscribe** and the name of the list you wish to leave.

WebConvert Pro— More Than an HTML Conversion Tool

Web Development: Create professional-looking web sites with flair.

Jack Johnson, Lightspeed Software

At a time when the Internet and web-based Intranets are gaining dominance in communications, and legislation is mandating Internet usage, it's becoming increasingly important for schools to have an HTML conversion tool that's easy to use and affordable.

Although there are many conversion tools already in the marketplace, Lightspeed Software's WebConvert does more than simply convert various word processing documents to and from HTML. WebConvert offers an array of user configurations, including batch conversion, pre-designed style templates to choose or create from, a Table of Contents to help organize a site, and the option of adding style with colors and graphics.

Product Description

WebConvert Pro is a Win32, dialog-based application that has a simple front-end and was designed to be user-friendly. WebConvert supports many popular word processing formats, including Microsoft Word, WordPerfect, AmiPro, and ASCII.

What You Need

WebConvert requires a minimum of an Intel 386/486 running Windows 95/98 or Windows NT 3.5/4. A minimum of 40 megabytes of hard disk space and 16 megabytes of RAM is required. For optimum performance, more memory is suggested.

WebConvert Pro is available to schools at a discounted rate. To download the WebConvert Shareware or a copy of the full-featured version, go to www.webconvert.com or visit Lightspeed Software's home page at www.lightspeedsoftware.com. To order WebConvert on CD, call (805) 324-4291 or E-mail sales@webconvert.com.

Jack Johnson is a Programmer at Lightspeed Net.

Student Built Computers

Program: At-risk youth learn to build and work with technology.

Phil Scrivano, Kern County Superintendent of Schools

For the past three years students at Community Learning Center have been building the school's workstations and servers. This successful program has had many benefits for students, staff, and the school. Community Learning Center is California's Charter school #77. It serves at-risk youth grades 7 through 12. This article will focus on the successes of the program and the process involved in construction of computers.

Students in groups of 2 to 4 are led through a short lecture and hands-on process of building a computer. The construction starts with an explanation of each part of the mother board and how to install cards, chips, and input parts. By the end of the process students can explain not only how each part works, but also can give an explanation of how a computer works. When the computer is completed it is checked over by the teacher and bench tested by the students. Once the machine is operational an image of an existing hard drive is loaded from the school server. Several machines can be imaged at one time.

A hard drive copying system is now being purchased that will enable students to install a fully loaded hard drive when building the computer. The students will then change the network settings, such as machine name, and the machine will be complete. With a disk copier in place, the start to finish time to build and configure a machine will be less than two hours.

Students who take a greater interest in the building of these computers are given an additional challenge to test their understanding of the process. The challenge is to clasp their hands behind their back and explain to another group of students how to build the computer. Students have particularly enjoyed teaching adults such as Kelly Blanton, Kern County Superintendent of Schools, school board member Walt Parsons, and teachers how to build a computer.

When working with Dr. Blanton, a student was explaining how to install a memory chip when he stated that "you must follow our Golden Rule". "The rule is: If it is gold and doesn't belong to you don't touch it". Dr. Blanton replied back that this rule was not correct. It should be "The person with the most gold rules". The students and Dr. Blanton really enjoyed the experience. From an educational standpoint, students demonstrated the highest levels of understanding and application of

what they had learned.

Students sign and date the back of the machines they build. An ID badge is placed on the front of the machine stating that it is a "CLC Student Built Machine". A secondary benefit to this process has been student ownership of the computers and the network. Students do not allow damage to happen to the equipment. The quality of the machines are enhanced by this student ownership.

The process of building a computer starts with the selection of parts. Each time computer parts have been purchased the cost of the machine has remained the same. Initially, \$1,500 purchased a 486DX 100 computer with 8 MB of RAM, 800 MB hard drive, 1 MB VLB video card, and a multimedia sound card with a 4 speed CD ROM. Today this price delivers a Pentium II 450, 32 MB of RAM, 4 GB hard drive, 8 MB AGP video card, and a multimedia sound card with a 32 speed CD ROM. A 15" monitor, keyboard, mouse, and speakers are also included in this price. The parts are not the latest and greatest on the market, but are generally less than six months old.

There are two steps in the selection of equipment. First, all parts are identified and researched to see if they are on the compatibility list supplied by the Microsoft web site. The second step is to send a quote list to local vendors in the area. Students help at this point to select the parts based on the information and prices supplied by the vendors. When all the parts arrive building begins.

The quote lists that are given to vendors are very specific. Power supplies must have a UL listing and in most cases only one part is listed for an item such as a network card. This ensures a quality machine and that the vendors are quoting on the exact same parts. It is not uncommon for the parts to come from as many as three vendors. Local vendors are used to expedite any problems that might come up. Vendors have learned that they are competing against each other and that we will be using them for more purchases in the future. The greater the quantity of machines being built the better the prices are. Generally discounts are better with purchases over 10, 20, or 30 units. If price is under or over the \$1,500 mark adjustments are made to either the amount of RAM or the size of the hard drive.

(See "Computers" on Page 10)

The Cisco uBR904 Cable Modem

Contributed by Brenda Lentz, Cisco Systems, Inc.

The Cisco uBR904 cable modem is a fully functional Cisco IOS® universal broadband router and an integral Data-over-Cable Service Interface Specification (DOCSIS) cable modem designed for use in the small office/home office (SOHO). It is a compact device that has the familiar features and programming interface of other routers in the extensive line of small and medium-sized business product offerings from Cisco. It provides packet data transport for TCP/IP applications between home or office computers and the cable head end.

The Cisco uBR904 has a single-cable, F-connector interface for connection to the hybrid fiber coaxial (HFC) system and a built-in Ethernet 10BaseT hub, providing four RJ-45 ports to which subscriber devices can be connected. All four ports are treated as one Ethernet interface by Cisco IOS software. More hosts can be connected to the Cisco uBR904 by connecting one of the 10BaseT ports to a hub. Additionally, the Cisco uBR904 has an RJ-45 console interface for configuration and diagnostic purposes.

The cable interface requires no configuration or setup procedures other than connecting the unit to the cable system. Ethernet interface configuration is provided through a command-line interface (CLI) parser, which can be reached either through the console port or via Telnet to the Cisco uBR904 Ethernet port. Console and TTY sessions are supported. In addition to the CLI configuration interface, modifications will be made to the PC ClickStart™ configuration utility to support Cisco uBR904 configuration. The console CLI can also be disabled and the configuration is then controlled solely from a downloaded file.

The Cisco uBR904 is compatible with DOCSIS specifications, including some optional features that are not supported by standard residential cable modems. These optional features include quality of service (QoS), IP tunneling, and IP routing.

Cisco uBR904 Applications

Depending on the software package selected, the Cisco uBR904 can be configured to fit the needs of various types of applications, including telecommuters, small offices, and branch offices.

Telecommuters

The Cisco uBR904 provides telecommuters with secure, high-speed access to their corporate intranet and the Internet. With the integration of Cisco's industry leading IOS software incorporated into the cable modem, we bring the technology powering 80% of the Internet into the home.

Broadband access to the corporate intranet and the Internet enables the telecommuter to achieve peak Internet and intranet connection speeds of 10 Mb/s upstream and 40 Mb/s downstream. Using the QoS feature built into the Cisco uBR904's IOS operating system, telecommuters can maintain this high-speed connection even during peak traffic hours.

Secure access to the corporate intranet enables both the telecommuter and the corporate information technology group to trust their data to the high-speed cable access capability of the Cisco uBR904. Although the typical cable network is by nature a shared medium in which data is broadcast to a large number of users, security is provided through full implementation of the RSA public-key Data Encryption Standard (DES), widely recognized as the standard for ensuring security and privacy in telecommunications infrastructures. The scalability and power of the IOS operating system will mean that uBR 904 users will have access to enhanced virtual private network (VPN) functionality in early 1999.

Support for multiple IP devices means that telecommuters can use the Cisco uBR904 to connect all of the IP-enabled equipment in their home to the internet, including PCs, fax machines, printers, and scanners. This allows the telecommuter to expand their home computing environment without costly upgrades to the cable modem hardware.

Small Offices

The Cisco uBR904 offers small offices high-speed access to the Internet, security, and the ability to support multiple PCs and other IP devices in the office network. By integrating a fully functional Cisco IOS router and cable modem, the Cisco uBR904 provides small offices with the ability to support up to 100 IP devices in their local area network (LAN) environment.

A full security suite for the company LAN enables the

(See "Cable Modem" on Page 8)

Microsoft News

Tuan Nguyen, Microsoft Corporation

Microsoft E-Rate Roadmap

If you're a qualified K-12 school or library, billions of federal dollars are coming your way for technology. The E-rate program began January 1998, and it's first come, first served.

From technology planning to Internet access to internal networks, Microsoft has a wide array of products and services to help schools and libraries take advantage of the new E-rate discounts. Here's a simple roadmap to Microsoft resources that help you in the application process and are eligible for E-rate discounts.

1999-2000 Application Window Set at 100 Days

To accommodate 1998 E-rate applicants awaiting their Funding Commitment Decisions Letters, as well as those new applicants who may need a little more time for planning, the SLC has extended the window for E-rate applications for 1999-2000 to 100 days. The window, which opened on December 1, 1998, will now close on March 11, 1999, at 11:59 p.m. ET.

E-rate Application Process

Your technology plan must specify how you plan to integrate the use of technologies into your curriculum. Get a head start with Microsoft's technology planning tools, including the Technology Roadmap and The Network Blueprint. Also see Understanding the E-Rate, comprehensive article on how to prepare and apply for E-rate funding.

Year 2000: Resources for Schools & Districts

Learn how schools are preparing for the complex set of problems that may occur when the Century turns. What are the issues? How can your school be prepared? What resources are available to help?

- Microsoft Year 2000 Resource Center: Comprehensive information about Microsoft products and how they are affected by the Year 2000 problem.
- Microsoft Certified Solution Providers (MCSPs): Independent organizations team with Microsoft to help you design or implement your Y2K solution. Ask your local MCSP about their Y2K experience.
- U.S. Department of Education: Tools and links

to resources that may be useful to all groups addressing the Y2K challenge.

- The Council of the Great City Schools: A list of Y2K tips for K-12 school districts as well as a comprehensive action outline.
- The Small Business Administration: Checklists, step-by-step testing instructions, and links to Y2K consultants.
- The Y2K Links Database Home Page: Here you'll find an extensive list of links to sources of information, contacts, and even an artificial-intelligence database called Millie that lets you ask questions such as, "Is my vendor's software Y2K-ready?" The site also offers reviews of software and hardware that address the Y2K bug.

Tuan Nguyen is K-12 Education Marketing Manager for Microsoft Corporation's Southern California District. He may be reached by telephone at (949) 263-3081 or by e-mail at tuannng@microsoft.com

4CNet

(Continued from Page1)

video project for the community colleges, please refer to the following URL:

<http://www.4c.net/ccvideo/ccv-videohome.html>

Editor's note: Information about 4CNet is important to many California K-12 districts since 4CNet provides Internet connectivity to many county and local education agencies. 4CNet originally started as CSUNet, connecting the California State University campuses and administrative offices, as well as K-12 county offices of education. CSUNet has grown to include all California Community Colleges (hence the four C's - CSU and the California Community Colleges) while the network has grown to a statewide network using the latest technologies and expanded bandwidth supported by ATM and FDDI.

Edwin Smith is Project Manager for 4CNet, the academic and administrative network of the California State University. He can be reached by e-mail at smithew@csu.net.

1999 Call For Speakers

Oswaldo Galarza, ABC Unified School District

CEDPA is in the process of developing its 1999 Fall Conference program for breakout sessions. Your participation will contribute to a successful conference. If you have a topic you'd like to present to our attendees, please sign up! This is your opportunity to share your experiences and lessons learned with your successful (or not so successful) hardware or software implementation. Please reserve your place early as we would like to have the Conference program for breakout sessions developed and published with the Conference Announcement in July.

We're especially interested in your experiences with the following topics:

- Administrative systems migrations (student or financial systems)
- E-Rate experiences
- Network connectivity
- ATM or gigabit Ethernet implementation
- Windows NT or Novell networking
- Emerging technologies
- Help desk support
- Data mining and warehousing
- Firewall design and implementation
- Intranet / Web development
- Instructional technology with the exception of curriculum

A breakout session typically lasts for 45-55 minutes and can seat up to 50 conference attendees.

A Call for Speakers form is included in this issue of the *DataBus*. The form is also posted at www.cedpa-k12.org in PDF format. You are encouraged to sign up as early as possible. Please complete and send your forms via postal mail, fax or e-mail to:

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In the Beginning...YzeroK

Contributed by Scott Sexsmith
Merced County Office of Education

Translated from Roman scroll dated 1 B.C.:

Dear Cassius:

Are you still working on the Y Zero K problem?

This change from BC to AD is giving us a lot of headaches and we haven't much time left. I don't know how people will cope with working the wrong way around. Having been going happily downwards forever, now we have to start thinking upwards. Gimme a break!

You would think that someone would have thought of it earlier and not left it to us to sort it all out at this last minute.

I spoke to Emperor Tiberius the other evening. He was livid that Julius hadn't done something about it when he was sorting out the calendar forty years ago. He said he could see why Brutus turned nasty.

We called in that charlatan Consultus Maximus, but he simply said that continuing downwards using minus BC won't work and as usual charged us a small fortune for doing nothing much. Surely we will not have to throw out all our hardware and start again? Macrohard will make yet another fortune out of this!

The money lenders are paranoid of course! They have been told that all interest rates will invert and they will have to pay their clients to take out loans. It's an ill wind...

As for myself, I just can't see the sand in an hourglass flowing upwards; can you?

I have heard that there are plans to stable all war-horses before midnight at the turn of the year as there are fears that they will stop and try to run backwards, causing immense damage to chariots and possible loss of life. And some oracles prophesy that the world will cease to exist at the moment of transition.

Anyway, we are still continuing to work on this blasted Y Zero K problem. I will send a parchment to you by fast chariot if anything further develops.

If you have any ideas please let me know,

Plutonium

Editor's Note: This is one of the many e-mailings that makes its way around the Internet. Its author and origin are unknown.

Cable Modem

(Continued from Page 5)

small business to trust their data to the high-speed cable access capability of the Cisco uBR904. While cable networks are, by nature, a shared medium, the Cisco uBR904 offers RSA public-key Data Encryption Standard (DES), widely recognized as the standard for ensuring security and privacy in telecommunications infrastructures. The scalability of the Cisco uBR904's IOS operating system will allow advanced firewall security to be available in early 1999.

Guaranteed high-speed access to the Internet is provided through the advanced QoS capabilities of the Cisco IOS software embedded in the Cisco uBR904. Regardless of the time of day or the number of other users online, QoS ensures the small office that its employees get constant, high-speed access and ensures that potential customers get high speed access to locally hosted Web site information.

Support for multiple IP devices means that small businesses can use the Cisco uBR904 to connect all of their PCs to the internet. This provides a tremendous cost savings compared to using a dedicated modem for each PC. By combining the functionality of a full-featured router with a cable modem, the Cisco uBR904 also enables business users to replace combinations of routers, bridges, hubs, and single-port cable modems with just one product. With the ability to link up to 100 IP devices to the Cisco uBR904, small businesses will find that the Cisco uBR904 provides a future-proof investment as their network grows.

Branch Offices

The Cisco uBR904 provides branch offices with secure, high-speed access to their corporate intranet and the Internet. By integrating a fully functional Cisco IOS router and cable modem, the Cisco uBR904 also provides branch offices with the ability to bring this high speed intranet and Internet connectivity to up to 100 IP devices.

High-speed access between the branch office LAN, the corporate intranet, and the Internet is provided by the Cisco uBR904's integrated cable modem. This allows the Cisco uBR904 to offer peak connection speeds of up to 10 Mb/s upstream and 40 Mb/s downstream. Using the QoS feature built into the Cisco uBR904's IOS operating system, the entire branch office can maintain this high-speed connection even during peak traffic hours.

Advanced security features enables both the branch

office and the corporate information technology group to trust their data to the high-speed cable access capability of the Cisco uBR904. Although the typical cable network is by nature a shared medium in which data is broadcast to a large number of users, security is provided through full implementation of the RSA public-key Data Encryption Standard (DES), widely recognized as the standard for ensuring security and privacy in telecommunications infrastructures. The scalability and power of the IOS operating system will mean that branch offices using the Cisco uBR904 will have the ability to create a virtual private network (VPN) with their headquarters in early 1999.

Support for multiple IP devices means that branch offices can use the Cisco uBR904 to connect all of their PCs to an internal LAN, the corporate intranet, and the Internet. By combining the functionality of a full-featured router with a cable modem, the Cisco uBR904 also enables the branch office to replace combinations of routers, bridges, hubs, and single-port cable modems with just one product. With the ability to link up to 100 IP devices to the Cisco uBR904, they can also link all of their other IP devices including printers, scanners, and fax machines to their local area network (LAN).

Cable Remote Subscriber Unit (CREST) is a standalone box that bridges desktop and laptop computers via a 10BaseT connection to the HFC system. The equipment will provide packet data transport for TCP/IP applications between a home computer and a Cisco Headend Cable Router for Internet access.

For a list of the cable modem's features and additional information, visit Cisco's website at http://www.cisco.com/warp/public/728/900/904_ov.htm.

Brenda Lentz is Inside Account Manager, Public Sector, Southern California, Cisco Systems, Inc., and works with Sue Mangiapane, Account Manager, Cisco Systems, Inc. Sue can be reached by phone at 949-789-5006, by Fax at 949-789-5005, or by e-mail at smangiap@cisco.com.

CEDPA's 39th Annual Conference
November 17-19, 1999
DoubleTree Hotel
Monterey, California



Posting #171 (98-99)

START DATE: ASAP

Cupertino Union School District

10301 Vista Drive • Cupertino, CA 95014-2091 • (408) 252-3000 • Fax (408) 255-4550

PROGRAMMER ANALYST

BASIC FUNCTIONS

Under direction, provides programming and technical support to users of the district's data processing system.

RESPONSIBILITIES

Identify and analyze user problems and requirements; Write and modify COBOL programs to meet user needs; Use a relational database management system to generate reports and retrieve information from the existing database; Provide training to users on various applications; Write and maintain user documentation and technical documentation; Design and develop limited application systems using DBMS; Install terminals and printers and configure on system; Maintain tape backups (daily, weekly, and monthly); Implement tape interface to and from outside sources; Assist users having difficulty with data entry.

QUALIFICATIONS

- Experience with SASIxp, school administration/financial programs and/or other related program experience very desirable.
- HELP desk experience desirable.
- Experience in coordinating application software training desirable.
- Windows and Macintosh environment.
- Demonstrated training and experience to ensure successful job performance.
- Experience using COBOL programming in an on-line environment desirable.
- Knowledge of and experience using indexed sequential files in a multi-user environment.
- Knowledge of Prime Computer operating system is desirable.
- Experience with computer operator functions is desirable.
- Ability to speak, read, and write English clearly.
- Ability to maintain cooperative relationships with those contacted in the course of work.
- Ability to pass District physical examination.
- Possession of a valid California driver's license.

SALARY AND BENEFITS

Salary Range: \$2,840.23 to \$3,452.13 per month. **Effective date of Employment:** ASAP. **Work Year:** 12 months. **Vacation:** 12 days per year. **Sick Leave:** 12 working days of sick leave per year. **Insurance:** Employees are eligible for health and medical, dental, vision and life insurance. **Holidays:** 14 paid holidays per year. **Retirement:** Public Employees Retirement System coordinated with Social Security Benefits.

APPLICATION PROCEDURE

Completed application must be received by Monday, February 22, 1999. Individuals interested in applying for the position of Programmer Analyst, Posting Number 171 (98-99) may obtain an application from:

Terry Nolan
Human Resources Manager
Cupertino Union School District
10301 Vista Drive
Cupertino, CA 95014
(408) 252-3000, extension 433
FAX (408) 255-4450.

We are an Affirmative Action/Equal Opportunity Employer.

President

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later in this publication and subscribe to our brand new listserv - Y2K. Given the volumes of available information - whether good, bad or incorrect - this new listserv should be of great value to each of us.

Planning for this year's Conference is well under way and the program is shaping up nicely. It looks like the speaker program and vendor exhibits will once again be filled with a wealth of helpful information and promising products.

So, plan on spending the year with your fellow CEDPA members. Make plans to attend each of our offerings and participate in the listservs. The participation of everyone is a requirement for a successful program - one that could reap great rewards for the K-12 Educational Community.

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Computers

(Continued from Page4)

There was an initial concern raised about the support of student built machines. In a show of support for the program Dr. Blanton stated that if the students build them, they can fix them. Most of the original machines are still in use at other schools in the program. When it came time to upgrade the memory of the original machines for Windows 95 six students installed chips on thirty machines in less than an hour.

You can get more information about Community Learning Center by visiting the school's web site at <http://clc.kcsos.k12.ca.us>. If you would like to see a quote list or have additional question send email to phscrivano@kern.org.

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