



CALIFORNIA EDUCATIONAL DATA PROCESSING ASSOCIATION
<http://www.cedpa-k12.org>

DataBus

“Serving California's Public Education Technologists”

Vol. 38 • No. 3

April-May, 1998

Technology Innovation Challenge Grant

Project LemonLINK: *Building a Connected Learning Community*

Darryl La Gace, Lemon Grove School District

The mission of our schools is to prepare students to be life-long learners in a global economy where there are constant and dramatic changes occurring daily in the workplace. No longer confined to the classroom, learning will be a process lasting a lifetime. This transformation demands an integration of the school, the home, and the workplace. The community of Lemon Grove is unique in its ability to provide a seamless communication and information system between the home, the school, and the entire community.

The connector is technology. Working diligently over the past five years, the District has fulfilled the first benchmark in its **LemonLINK** vision by building a district-wide network, *one of the most advanced computer networks in the nation*. All sites in the District are connected to each other via a high-capacity wireless backbone using state-of-the-art microwave links. The wide area network provides enough bandwidth to support a full duplex Ethernet connection at 10 megabytes to each of the District's eight schools. The network supports voice and compressed video using one of four T1 channels also available over the microwave link.

The advanced architecture of this network provides unlimited Internet connections not only to every computer in every classroom within the District but also to the broader community as well. We are now building a community network that extends learning beyond the

traditional classroom. The construction of the community network has already begun, linking the City of Lemon Grove and the District. As a result of this joint effort, the District is currently providing contracted information system services to the city. A wireless backbone has been connected to City Hall and fiber laid to interconnect other city facilities to the District, which acts as the network operations center. Meaningful partnerships between business and our community has made this possible.

Technology exists that can offer expansive and efficient learning opportunities for our students. The Lemon Grove School District and its partners envision a comprehensive educational system that embraces this technology as a centerpiece to its educational program. Through the

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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 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 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>

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Conference Update

Event: Palm Springs site of 1998 meeting.

Terrell Tucker

Panama-Buena Vista Union School District

Imagine yourself sitting at your desk looking for the answer to a router problem. Suddenly, you realize that Joe Smith of XYZ School District has the same equipment and, undoubtedly, the answer to your problem. You dial his number to find he is in Palm Springs at the 1998 CEDPA Conference. Your first thought is "I need to be there too!"

Don't let this happen to you! Before you read the remainder of this article, mark October 14, 15 & 16 on your calendar. This year's conference looks to be another essential trip to find answers to many of your district's problems. What better way to spend a few days than to network with peers, exchange ideas and learn what is going on in the industry? Not to mention a few days in the beautiful Palm Springs sunshine!

The buzzwords around the technology world all seem to involve E-rate, Standardized Account Code Structure or the year 2000 snafu. With vital issues such as these hounding you daily, answers are essential. Each year, the CEDPA Conference proves to be the most effective mechanism to get the information you need. It's also the best way to renew old acquaintances and make new ones.

The Conference agenda will be filled with the usual, exciting slate of presenters, exhibitors and internet/intranet/network tools. However, this year will also include the first Network Operations Center. Our goal is to present a room filled with the latest technology, fully linked to various network operating systems, the web and up-to-date switching and routing solutions. There will also be engineers from many companies to answer questions, demonstrate products and provide "tech talks". These mini-breakout sessions will complement the breakout sessions that always prove to be the real meat of the Conference. They will be scheduled in advance, technical in nature and catered to the current needs of attendees. There will also be ample time to speak with engineers one-on-one and to surf the net or retrieve e-mail.

There will be hospitality rooms, another large exhibit area with tons of donations from generous vendors, hospitality suites and, of course, everything will begin with the President's reception. The Conference will end with the third annual, post-conference golf tournament. This will truly be a week to remember. Do not miss it!

Vendor Show – 1998

Mike Caskey

Stanislaus County Office of Education

Preparations for the 1998 CEDPA Vendor Show are under way. Four vendors, Trinity Group, Eagle Software, Scanning Systems, and Digitronics Software have already purchased booths and three other vendors have verbally committed to participation in this year's show, for a total of nine booths. So why am I anxious?

As you know, this year's conference is being held in Palm Springs at the Marquis, the site of one of our most successful conferences. It is also a site with a limited capacity for booths. Nine booths are obviously not a whole show. However, they do represent over 15% of the total vendor booth capacity.

If there is a vendor that you would like for me to contact, please let me know. Thanks to new and exciting technology, I now have both voice mail and e-mail. You can reach me at mcaskey@stan-co.k12.ca.us or at (209) 525-5095. I appreciate your tips and suggestions.

The CEDPA vendor show puts you in contact with the companies that are familiar with, and work well in the education environment. These companies support CEDPA and, in turn, deserve our support as we provide technology to our districts and county offices, and go about the business of "reaching the classroom."

Other CEDPA News

CEDPA Directors Darryl La Gace, and Greg Lindner recently presented at the Annual CASH Conference in Sacramento on February 26, 1998. The title of the seminar was *Legislative and Policy Issues Related to Technology*. The seminar was well received by all who attended and highlighted the work that CEDPA is doing with other associations on a statewide basis. The fact that CEDPA was asked to conduct the seminar shows that our association has moved beyond the DP Glass Wall. The Powerpoint presentation for the seminar can be found on the CEDPA Web page at <http://www.cedpa-k12.org>

CEDPA has been very involved in the California County Superintendents Educational Services Association (CCSESA) Technology and Telecommunications

(See "News" on Page 11)

Cisco Network Academies – A Solution with Purpose

Curriculum: Web-based technology training program offers schools a turnkey solution.

Sue Mangiapane, Cisco Systems, Inc.

Note: The following is an excerpt from the February 27, 1998, Senate Subcommittee Hearing, Los Angeles, California.

To quote a recent study released by the Department of Commerce, “Just a few years ago, Java was coffee, C was a passing grade, and web masters had eight legs.” As we all know, information technology is rapidly changing the way we live, work, play, and learn. The economy of the 21st century will be an information-based economy - the question is, are we ready?

As we approach the millenium, our schools face serious challenges in educating the workforce of tomorrow. Although funding to purchase the tools of the information economy is improving, schools must also address the lack of time and resources to maintain this equipment and the lack of expertise to teach these concepts to their students.

Cisco believes that most of our schools are behind the curve on preparing the future workforce of this country to support its emerging technology infrastructure. As evidence of this, an Information Technology Association of America report released in January of 1998 states that the job deficit for information technology workers in this country stands at 346,000, or approximately 10% of the total number of positions available. Virginia Tech President Paul E. Torgersen, commenting on these findings, said “The future economic competitiveness of the nation is dependent on maintaining a qualified flow of information technology workers. We must look to creative partnerships among industry, associations, education, and government to help close the worker shortage gap.”

Cisco is proud to announce one such partnership. In October of 1997, Cisco launched a new program called Cisco Networking Academies. This program, in the works for almost four years, educates and certifies high school and college students to design, build, and maintain computer networks and represents a partnership between Cisco and schools, government, and industry.

The Cisco Networking Academies program is currently operational in over 150 schools in 16 states. We expect to be established in almost 1,000 schools in virtually all 50 states by this Fall. In Los Angeles county alone,

over 150 more academies will begin operation during the '98 - '99 academic year.

Our program attempts to provide a turnkey solution to schools. We not only offer a four-semester, multimedia, web-based curriculum that will continually evolve to include new concepts, but also a complete suite of lab equipment on which students can practice their skills, teacher training, support for the curriculum and the equipment, a marketable certificate provided to students who can demonstrate competence after completing the curriculum, and a web-based virtual community where academies can share insights on all aspects of the program, including its strengths and weaknesses.

The program was designed to avoid the mistakes we and other companies have made in the past. Specifically, Cisco Networking Academies does not simply drop technology into the classroom, nor does it stop at training teachers to use networking equipment. Instead, we intend to provide virtually everything a school needs to effectively and economically teach students how to build and operate networks. Students graduating from this program will be strong network administrators, designers, and troubleshooters because they will have substantial experience doing these jobs on real networks.

The curriculum was given a real test in April 1997, when Cisco took some of the students from Thurgood Marshall Academic High School, the program's pilot high school in an impoverished area of San Francisco, and brought them to the San Jose Convention Center. Here, in less than a day, these students designed, installed, and configured a 70-node trade show network for the California Community College Foundation (CCCF). This network, using the latest technologies, connected all trade show booths and conference rooms. The network operated flawlessly throughout the three days of the trade show. Amazingly, at that point, the students who installed the network had not yet completed even half of the four semester curriculum. The President of the CCCF, David Springett, said “Vendors, presenters, and the Foundation found it to be an invaluable service. Cisco's partnership

(see “Academies” on Page 11)

E-rate Update

Initiative: Politics, lawsuits, “stacking” issue delay program’s implementation.

Greg Lindner, Yolo County Superintendent of Schools

The E-rate program is moving fast and furiously. No doubt you have read about it in the newspapers and/or television. Unfortunately a lot of politics have surfaced around this program. It’s more important now than ever before that we in K12 communicate with our legislators in support of the program.

Recent events that have occurred have centered around a lawsuit by some of the telecommunications carriers, the California Teleconnect Fund (CTF), and the timelines for getting your applications into the Schools and Libraries Corporation (SLC). Information contained below was excerpted from our E-rate Central Web page at <http://www.yolo.k12.ca.us/erate.html>

3/6/98 On February 24, 1998, SBC Subsidiary Southwestern Bell Telephone Co., BellSouth Corp. and GTE filed a Joint Brief In Appeal Of FCC May 1997 Universal Service Order. This Brief basically is stating that the FCC erred on a number of items. The full text of the brief can be found in this MS Word document at this location <http://www.sbc.com/Articles/19980224-01-fcbrief95.doc>

3/6/98 Update of CPUC Workshop held on March 4, 1998. Representing CEDPA, I attended the recent California Public Utilities Commission (CPUC) Workshop on Implementation.

Jackie Lamb from CDE, myself (Greg Lindner), and Skip Sharp from San Diego COE, attended the workshop on Wednesday to represent K12 schools in California. Jeff Bowser of BaeNet and Gene Endicott of Oakland USD, and a representative for San Juan USD were also in attendance.

I attended representing CEDPA, CCSESA, and Yolo COE while Jackie represented K12 Education and Skip represented San Diego as well as CCSESA. It was quite an interesting meeting. The meeting appeared to drag at times over insignificant issues. While it appeared that the issues were raised for a particular purpose, the result was the loss of valuable time that could have been used more productively. It appeared quite evident that our educational contingent was much more informed about the E-rate program and CTF than many of those in attendance.

One good thing that came out of the meeting was a commitment and recommendation from those in attendance that schools would not have to fill out a new CTF

application if they already had a CTF application on file for anything else. That will save schools a tremendous amount of time and effort. The other thing that was agreed to in principal was that the bills would show the E-rate discounts in summary form but that upon request the carriers would provide the detail in electronic form or in written form. I suggested that most K12 folks would request the detail whenever they added or changed services so that they could audit their bills.

Other issues that were left undecided were the issue of retro-activity and implementation of “stacking”. Stacking is the term being used to describe a school taking advantage of both the E-rate program and the CTF program. Some of the Telecommunication Carriers in attendance were not aware of the fact that E-rate provides retroactive discounts for telecommunication services to January 1, 1998 or to when the service began if it began after January 1, 1998. They have stated that their billing systems will not be able to handle this. Further, they argue that the CPUC Resolution allowing stacking does not go into effect until the “implementation” issues are resolved. The position we represented for K12 was that the CPUC decision became active on February 4, 1998 when it was passed - not when the implementation issues are cleared up. The CPUC Staff are to get a ruling on this.

The bottom line issue that is being discussed is how long will it take for the telecommunications carriers to modify their systems to handle the two programs. All are saying a long time, however, some are saying longer than others. Pacific Bell mentioned February 1999 as possibly the earliest date they could be ready.

Realizing that there are significant changes that need to be made to their systems I offered a proposal that I thought schools would accept. I offered that we would be willing to live with waiting 3, 6, or 8 months for the systems to get modified as long as the discounts were retro-active back to February 4, 1998 for CTF and E-rate and to January 1, 1998 for E-rate. The other K12 representatives agreed that this would be workable. None of the Telecommunications Carriers in attendance would agree to that proposal. Even after being asked twice they would not agree. We (K12) felt the proposal was very reasonable. Perhaps the carriers in attendance feel that if they

(See “E-rate” on Page 10)

Microsoft Happenings

Glenn Osako, Microsoft Corporation

Technology Solutions and E-Rate Planning and Preparation: A Seminar for Connecting Schools to \$ and Solutions

There is money for your school and district technology plans and dreams on a first-come, first-served basis in 1998! So make time TODAY to attend this free seminar to learn more about Schools and Libraries Universal Service Program (E-Rate) federal funding. Also see the latest education technology and infrastructure solutions from four companies (Microsoft, Dell, Sprint & NCS) in one location. Start today to get your students wired! In this case, time really does = money! You can't afford to miss this free seminar on funding your schools' technology future! Lunch will be served! Prizes will be drawn, including a chance to win a Dell notebook computer! Take-home literature provided!

Who should attend:

K-12 administrators, district and site technology coordinators, information system managers

Date & Location

Thursday, April 30

9:00 A.M.-3:00 P.M.

Microsoft Santa Monica Office

1620 26th Street

Suite 350, South Tower

Santa Monica, CA 90404

Seminar content includes:

- **Infrastructure** - An overview of the technology building blocks for schools and guidance on planning technology infrastructure to support learning objectives. Receive Sprint's Education Tool Kit on Technology, a guide to simplifying education technology planning and preparing grant applications.
- **Funding** - Current E-Rate information and implementation strategies for schools.
- **Hardware** - Latest information and trends on hardware, developments on the Intel (industry-standard) platform, total cost of ownership and relation to educational environment, the dilemma of Apple vs. Windows®, and guidance on selecting a vendor.
- **Software** - Through the Connected Learning Community vision, learn about tools to connect schools, homes,

and communities over local area networks (LANs), wide area networks (WANs), and the Internet. Student information management systems will be reviewed to help give you the student administrative infrastructure so critical in providing instructional support. Discover ways to save money on software products through reduced pricing and Microsoft Licensing Programs. Security and access policies also will be discussed.

For More Information:

Specific seminar location and driving directions provided upon registration confirmation. Please provide disability requirements at least two weeks before the seminar. For more information, call 1-888-236-6605.

Make your reservation for this FREE seminar by faxing to (206) 441-6369 or calling 8:00-5:00 PST 1-888-236-6605.

Microsoft Office 98 Macintosh Edition Ships

Get the most out of your Macintosh with Microsoft Office 98 Macintosh Edition-intelligent applications tightly integrated with the Mac OS that help you accomplish more with far less effort.

Work the way you want with Microsoft Office 98 Macintosh Edition, which brings together the world's best-selling business productivity applications in an environment tightly integrated with the Mac OS. Everything about it is designed to help you get better results with less effort, to communicate and collaborate easily, and to get the most out of your Mac.

Office 98 supports the platinum appearance defined by Apple and seen in Mac OS 8. In addition, extended support for Apple technologies makes it easier than ever to maximize all the resources of your Power Macintosh®.

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Microsoft

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tions mean that once you've learned the features in one application it's a snap to use other Office applications.

With Office 98 you don't have to work alone. Powerful communication and collaboration features enable you to share work with others across platforms (ex. same file format as Office97, Windows), across the office, and even over the Internet. Revolutionary new Web technology in Office 98 helps you quickly and easily author exciting multimedia pages directly from your Office 98 applications without having to learn HTML. Add hyperlinks to other Office documents for easy navigation from document to document-or to Web pages-on your hard disk, company intranet, or the Internet. Easily communicate, collaborate, and share Office documents with others-even Windows users-by using Microsoft Outlook Express. And take advantage of advanced workgroup features such as Document Versioning, Track Changes, and In-Place Comments in Word, and Shared Workbooks in Excel.

Office 98 Macintosh Edition is the suite that helps you get the most out of your Macintosh and create results as brilliant as your ideas. For more information, visit: <http://www.microsoft.com/macoffice/>.

Education pricing for Office98, Macintosh Edition:

Academic Estimated Retail Price for Office98, Macintosh Edition (Part #021-02195): \$199

Academic Open License Estimated Retail Price for Office98, Macintosh Edition (Part #021-02244): \$57

Customize, Deploy, Administer Across Platforms! IEAK 4.01: Now for Windows, Macintosh, and UNIX

The Internet Explorer Administration Kit (IEAK) 4.01 is the must-have tool for Internet service providers, corporations, and educational institutions who want to customize, distribute, and maintain Internet Explorer from one central location across multiple computer platforms—royalty-free. Find out what the IEAK, available in more than 20 languages can do for your organization by visiting: <http://ieak.microsoft.com/>.

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Development of 1998 Conference Speaker Program Continues

The 1998 speaker program is taking shape. CEDPA is looking at several alternatives for keynote speakers including representatives from major computer firms. The conference breakout session program is also coming together but we still have room for *your* presentation! If you'd like to share your experiences at the conference, please fill out and submit a Call for Speakers form included in this issue. In order to meet our objective of publishing the breakout session program with the conference announcement, please reserve your place early.

This year's conference theme is "Reaching the Classroom." We're especially interested if you have a presentation that's related to our theme. We'd also like to hear from you if your presentation deals with:

- network administration
- implementation of or experience with emerging technologies
- Windows NT/Windows 9x policies and profiles
- data warehousing
- firewall design and implementation
- proxy servers
- UCE or SPAM filtering for e-mail
- intranet rollout
- web site re-engineering

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*. If you're interested in speaking, please complete and send your form via postal mail, fax or e-mail to this year's conference speaker chairperson. Also, if you know of someone who is interested in speaking, please have them complete and submit the form to or contact:

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Tactical Planning—Turning Vision Into Reality

Implementation: Objectives, tasks and monitoring keep your plan on track.

George Sullivan, Northrop-Grumman

Editor's note: This is the second installment of a three-part series on Network Technology Planning. The first installment appeared in the December-January issue of the DataBus.

With the completion of the overall Strategic Technology Plan for your district and buy-in obtained from your superintendent, board, and other stakeholders the next step is to turn this plan into one or more "Projects" which implement your strategic plan.

TACTICAL PLANNING = PROJECT MANAGEMENT

In order to plan and execute a project you will need a firm grasp on the following concepts:

Objective - What the plan will accomplish and what it will not accomplish. It is extremely important to be clear, lest you foster false expectations. Your project might be installing category 5 wiring in a school. That's it, this is not a complete Local or Wide area network project, it is simply installing infrastructure. Only in conjunction with many other efforts do you have a complete network.

Task List - What will be done? Who will do it? And When will it be completed? The interrelationship of tasks is important here as well. Those of you who cook dinner for your families are good project managers. Some tasks are done in series, and some tasks are done in parallel towards the goal of a satisfying meal served in the proper way. You also learn to allocate resources such as burners on the stove, and food processors, etc. The principles learned here easily apply. If someone can use project management software, it should be used early. It will help manage the project, but more important the graphs produced will make the relationship between tasks clearer. In our wiring project the technical staff might check the blueprints for accuracy, a consultant might design the wiring plan, and a wiring contractor might do the work.

Resources - The plan should identify the resources needed. This should include resources currently available and those needed. The plan asks Who or What is needed, how long and the approximate cost. Remember! Diverting a resource owned by the district isn't free, include the cost implications. Don't figure "we pay that person to do that anyway!"

Project Budget - This is at once essential but almost always initially inaccurate. The costs will be tuned during the RFP process but try to stay within 10%. Potential vendors and colleagues who have done similar projects are excellent potential sources for estimates. At the very least your budget should identify the cost elements. Also, you should explicitly state the risks associated with project slippage both from a schedule perspective and a cost perspective.

Metrics - You grade your students, and project metrics are used to grade the Tactical Plan's effectiveness. These metrics can be divided into two categories: Those which judge the plan's performance and those which judge the effectiveness of the technology which the plan invokes. Why put yourself through this? "Nothing breeds success like success" As you work your tactical plan and your administrations see the results your credibility will rise and things go smoothly. Metrics you might include:

- **On Time/Within Budget** - This is the project manager's home run.
- **Educational Effectiveness** - Did what you do help? The measure here is test score improvement

You can hedge your bets here. Set realistic time and expense targets. Estimation is an art and the way to perfect your form is practice. Look at cases where you were right and cases where you were wrong. Incorporate these lessons into this new exercise. You will get better!!!

THE RFP

In order to procure the needed resources you will have to write one or more RFPs—"Request For Proposals." This is a formal process where you communicate your needs to a group of potential vendors. It is important that your needs be expressed clearly and concisely. When the responses arrive they must be evaluated. It is wise to determine your evaluation criteria before sending out the RFP. In the case of complex proposals it is often wise to hire a consultant (*such as Northrop Grumman*) to assist in the evaluation. The committee doing the evaluation should represent the stake holders since each group has a

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LemonLINK

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development of a community Intranet, web-delivered applications will be available not only to our students during the day, but also to the entire community. This community Intranet will provide access to parents of students, community members, city government, community facilities, parochial school, and the local library 24 hours a day.

Building on the foundation the Lemon Grove School District has established, Project **LemonLINK** strengthens collaborative partnerships that will utilize the network system already established to build and create a District/community Intranet. Our business partners have pledged to help bear the costs and to marshal resources collaboratively in the implementation of the goals for this grant program. . The school district will serve as the hub, forming a bridge between business, schools, students, parents, and community members.

Our vision is to promote literacy and academic achievement by providing all Lemon Grove students and their families with direct link-ups with teachers, classroom materials, and the unlimited global resources of the Internet. Additionally, specially designed electronic lesson units will enable class work to be directly accessed from home via the Intranet, extending the hours of the school day to anytime and almost anyplace. Through this process, Lemon Grove students and residents will become a community of learners, linked to the information superhighway and to local sources of information including the local library, government offices, and community centers. They will have increased opportunities to build technology skills and acquire knowledge to improve their education, career, and economic opportunities.

The Lemon Grove School District and our collaborative partners have set the following goals and objectives for Project **LemonLINK**:

Goal 1 – To establish a collaborative learning environment for students, teachers, parents, and members of the Lemon Grove community.

Objectives:

- 1.1 By the end of the five-year funding period, Project **LemonLINK** will have developed, refined, and implemented a working model

District Intranet linked to the entire community.

- 1.2 By the end of the fifth year of funded implementation, 90 percent of the families in the District will be able to have Intra/Internet access at home through the District's cable modem network.
-

- 1.3 By the end of each year of funded implementation, an additional 20 percent or more of the classroom teachers will provide increased guided Intranet access for students and their families.
-

Goal 2 – To establish a comprehensive technology-based education environment which will stimulate student's engagement and help them learn to challenging standards.

Objectives:

- 1.1 By the end of the first year of funded implementation, Project **LemonLINK** will have developed, refined, and implemented interactive learning units (**LemonAids**), technology-based lessons with extended student research activities for use on the Intranet in all core curriculum areas.
-

- 1.2 By the end of the second year of funded implementation, Project **LemonLINK** will have developed, refined, and implemented performance-based authentic assessment strategies designed to assess and document the participating students' competence in core curriculum areas.
-

- 1.3 By the end of the five-year period, 95 percent of students will be using the computer as a tool for web-based applications at least once per week.
-

Goal 3 – To institutionalize a comprehensive, pro-

(See "LemonLINK" on Page 10)

LemonLINK

(Continued from Page 9)

professional, and continuing staff development program which will foster and support the effective integration of technology throughout the curriculum.

Objectives:

- 1.1 By the end of each year of funded implementation, 20 percent of teachers will have participated in an intensive summer institute and three or more inservice workshops/training sessions during the school year designed to improve their instructional and technology use skills.
 - 1.2 By the end of each year of funded implementation, teachers will have demonstrated their ability to use technology in support of their instructional program by designing and/or using one or more lessons for classroom/home use which used the Internet as a learning tool.
-

In order to realize the Project **LemonLINK** vision, to meet the challenging eighth grade technology standards and address the learning needs of our student population, the Lemon Grove School District will install additional equipment, adding software and workstations in classrooms. Our goal is to provide a ratio of one computer station for every four students. Technical support personnel will be added as the number of workstations increases.

Project **LemonLINK** is a catalyst for change in the way students learn and access information and in the way teachers provide instruction. It empowers all students and their parents to have equity access to technology, strengthen learning to challenging standards in core academics, and build literacy and technology skills in an exciting new way—utilizing the Lemon Grove School District Internet/Intranet. The project's Intranet transforms classrooms and student homes into information-age learning centers, providing access to learning using *LemonAids*, high-quality software, and other resources for information.

Lemon Grove School District is determined that this District and its students will move into the 21st century not only prepared for its challenges, but equipped to take the lead in meeting them.

E-rate

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wait long enough they will not have to do anything (see link above re lawsuit filed).

The next step is for another meeting to be called to discuss the issue of retro-activity. The CPUC will wait until the SLC releases their rules on how they will handle payments on this. Once done, the CPUC will set up the next meeting.

I would encourage all K12 to call their telecommunications provider and ask them to explain their position on CTF and E-rate and if they are involved in the lawsuit - to explain their position and how it helps or hinders schools.

3/6/98 From the SLC Web Page: <http://www.slcfund.org>

“Important New Notice (3/6/98): The SLC letters to our clients acknowledging the posting and/or receipt of Forms 470 reflect a closing date for the 75-day window of April 15, 1998, contrary to the Web Site notice of March 5, 1998. Indeed, the window officially closes on April 15. Therefore, the materials provided on this Web Site have been revised to reflect the April 15 closing of the window. Accordingly, **March 18** will be the last day SLC will be able to receive Forms 470 for applicants who want to complete the 470/471 application process within the 75-day window.

We regret any confusion that the 3/5/98 notice on this Web Site may have generated.”

CEDPA Listservs

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.

To join a 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 to the message.

Academies

(Continued from Page 4)

with the high school students demonstrated how private industry's active involvement in education can advance students' skills and future prospects."

All good partnerships must benefit each partner. Specifically, the Cisco Networking Academies program provides substantial return for students, teachers, schools, government, and industry.

Students enjoy a fun-to-use curriculum that provides job skills leading to gainful employment in IT jobs. Student classroom time is divided between using the multimedia curriculum with its animations, pictures, examples, and exercises and actually configuring and operating real network equipment in the lab. While the students are learning the skills essential to network administration, they are building reading, writing, and math skills through the required projects and other assignments.

Teachers get motivated students and knowledge critical to our new information economy. One teacher commented that "Energy level by these students is so high I cannot find words to describe the feelings." Another said "Monday, we had to tell (the students) to leave at 5PM!"

Schools get a relevant new curriculum and, perhaps more importantly, people to help maintain their computer networks. Students, under proper supervision, are encouraged to learn about and help maintain the networks of not only their own school, but also schools elsewhere in the area.

The government has shown strong interest in the program because it supports "technology in the classroom" and "school-to-career" initiatives. Linda Roberts, Director of the Office of Educational Technology at the U.S. Department of Education, says that "the Networking Academies program is in tune with the President's initiatives on educational technology and in the best spirit of public-private partnership."

Finally, industry is excited about the opportunity to hire the certified graduates from the Networking Academies program. Cisco will do what it can to bring together hiring managers and program graduates, although we will also take care to ensure that we are not a bottleneck in this enormous endeavor.

Cisco is proud of the Networking Academies program and pleased that it has attracted the Government's attention. However, we would like to emphasize the importance of more of these programs be implemented,

perhaps using this program as a model. Our program alone will not be enough. Most estimates project that the high-tech worker problem will get worse before it gets better. Already, the ITAA study shows that 50% of the IT company executives cited lack of skilled/trained workers as "the most significant barrier" to their companies' growth during the next year - a problem viewed as significantly greater than economic conditions, profitability, lack of capital investment, taxes, or regulation. Through programs such as Cisco Networking Academies, we can address a number of problems at once.

One of our most important success stories emphasizes the impact of the program on its most important stakeholders - our children. In a recent interview with Fox TV, a student at Dorsey High School in Los Angeles, a school where 70% of the students live under the poverty level, commented that, were it not for this program, he would likely be in jail. Prior to entering the program, he had failed every subject because, as he put it, school was "boring." Now, looking ahead at his prospects, he says "I think I have a future."

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News

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Steering Committee. Greg Lindner was appointed as the official CEDPA representative to the committee.

CEDPA is planning to attend an upcoming ECTL meeting (Educational Council on Technology in Learning) to introduce our organization to the ECTL board and let them know what our mission is and the role we play in Educational Technology.

CEDPA is also involved in the discussions being held regarding Round 2 of the Technology Literacy Grants.

If you have any concerns or questions regarding the items above please let us know.

Planning

(Continued from Page 8)

different perspective.

MANAGING THE PROJECT

One individual should be appointed to manage the project. There are three guides to managing the project:

1. The Task List
2. The Project Budget
3. The Vendors' Statements of Work as contained in their contracts

Another important aspect of project management is vendor management. This insures that you are getting what you were promised, that the price is as stated, and that work is done in a manner and quality consistent with your requirements. The heart of this effort is the Acceptance Test Plan, which should be incorporated within the vendor's statement of work. In the case of a network or computer lab this test plan should exercise all of the features and functions outlined in the vendor's proposal

and the product literature. The vendor is responsible for the performance of the systems supplied. The way to insure compliance is a "Hold Back" where 15 or 20% of the total payment owed the vendor is held back until the system or service passes the test.

It is important to report meaningfully on progress and costs while work is underway. As mentioned above project manager software makes this a simple task, but even a hand written report highlighting Tasks Accomplished, Tasks Remaining and budget left will update your boss and highlight potential problems. When the project is complete then the next step is to define an Operation Plan. This will be discussed in the third and final in this series on planning.

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