Meet the adaptive, proven SIS solution for the evolving EdTech landscape.

Customer Input Driven

Comprehensive and Compliant

Integration Focused and Interoperable

Empathetic and Responsive

As industry pioneers and constant innovators for over 20 years, Aeries has led the SIS industry with an expert team comprised of former school district employees that know and empathize with your challenges.

www.aeries.com - (888) 487-7555 - sales@aeries.com
VoiceLift Pro Microphone
The New Performance Standard in Voice Amplification

Studies show significant gains in student achievement when a voice amplification system such as the Extron VoiceLift® Pro Microphone is used to distribute the teacher’s voice evenly throughout the classroom. VoiceLift Pro utilizes advanced wireless RF technology that is not susceptible to environmental factors, such as windows, sunlight, and fluorescent lighting, which create problems for infrared systems. Benefits include higher sound quality, increased reliability, and greater range.

Features:

• State of the art RF wireless technology provides superior sound quality, increased reliability, and greater range over traditional systems.
• Lightweight pendant microphone can be worn around the neck or clipped onto clothing.
• Optional handheld microphone is ideal for student use, team teaching, or guest speakers.
• Available as complete systems or as a plug-and-play upgrade for Extron’s award winning PoleVault classroom AV systems.
• Advanced digital signal processing optimizes voice intelligibility and audio quality.
• Instant Alert provides instructors a quick and discreet way to signal for assistance in the event of an emergency
• The pendant function button allows triggering additional capabilities such as lecture capture, podcast recording, and more.

Grants Available:
Apply at www.extronclassroom.com/grant

Extron
800.633.9876 • www.extronclassroom.com
WE ARE NOT YOUR TYPICAL TELCO
CUSTOM SOLUTIONS. BEST PEOPLE.

Southern California Edison
Wholly Owned and Operated | Fully Diverse Routes | CLEC since 1998

Our network provides critical connectivity to 140+ locations including major carrier hotels, carrier POPs, data centers, and ILEC central offices. It covers over 5,700 route miles of fiber within an approximate 50,000 square-mile service area.

SCE has a unique ability to provide both the vertical infrastructure and backhaul using our 100% owned and operated fiber network in Southern California. We have an experienced construction team to coordinate all phases of development.

Wavelengths | Switched Ethernet | Dark Fiber | Dedicated Internet Access | Custom Solutions | SONET

CALL US: 1-800-634-7999
DIRECT: 1-909-274-1004
edisoncarriersolutions.com | carriers@sce.com
The EdTech Journal is the official publication of the California Educational Technology Professionals Association (CETPA). EdTech Journal is published twice a year as a service to our members and information technology managers across California’s K-12 and secondary education school systems.

CETPA and the EdTech Journal assume no responsibility for the statements or opinions appearing in articles under an author’s name. The services of an attorney or accountant should be sought in legal and tax matters.

All copyrights and trademarks are property of their respective owners. Except where otherwise noted, content in the EdTech Journal is licensed under a Creative Commons Attribution 3.0 License.
BOARD OF DIRECTORS

PRESIDENT
JULIE JUDD
Ventura County Office of Education
julie.judd@cetpa.net

PAST PRESIDENT
STEPHEN CARR
Ventura County Office of Education (retired)
stephen.carr@cetpa.net

PRESIDENT-ELECT
LORRIE OWENS
San Mateo County Office of Education
lorrie.owens@cetpa.net

TREASURER
PETER SKIBITZKI
Placer County Office of Education
Peter.skibitzki@cetpa.net

SECRETARY
BRIANNE FORD
Irvine Unified School District
brianne.ford@cetpa.net

DIRECTORS AT LARGE
ERIC CALDERON
Riverside County Office of Education
eric.calderon@cetpa.net

DEWAYNE COSSEY
Vista Unified School District
wayne.decossey@cetpa.net

JEREMY DAVIS
Capistrano Unified School District
jeremy.davis@cetpa.net

DAVID GOLDSMITH
Hanford Elementary School District
david.goldsmith@cetpa.net

ROLLAND KORNBLAU
El Rancho Unified District
rolland.kornblau@cetpa.net

TIM LANDECK
Los Gatos Unified School District
tim.landeck@cetpa.net

PHILIP SCRIVANO
Simi Unified School District
phil.scrivano@cetpa.net

STEVE THORNTON
Menifee Union School District
steve.thornton@cetpa.net

EXECUTIVE DIRECTOR
ANDREA BENNETT
CETPA
andrea.bennett@cetpa.net

DIRECTOR OF EDUCATION AND EVENTS
LAUREL NAVA
CETPA
laurel.nava@cetpa.net

OFFICE AND MEMBERSHIP COORDINATOR
BREEANN NILES
CETPA
breeann.niles@cetpa.net

For 35 years, Sehi Computer Products, Inc. has supported schools by providing educators with innovative IT solutions that engage students and advance academic achievement.

HP Sales, Service and Support
• Chromebooks
• Mobility Solutions
• PCs and Laptops
• Printers & Imaging
• HP Networking
• Server Solutions
• Storage Solutions
• Supplies & Accessories
• Audio and Video
• Digital Displays
• Warranty Services
• Managed Print
• Chrome Services
• Classroom Solutions

35 Years of IT Innovation

See all Specializations*
*HP specializations include: Services Sales, Delivery, Managed Print, Designjet

1275 Puerta Del Sol
San Clemente, CA 92673
1-800-346-6315
www.BuySehi.com
Congratulations on completing a successful year of supporting learning in the classroom and the business of education. You and your team have, no doubt, started the summer with a list of projects to ensure that the next school year starts well. However, as we end the 2017-2018 school year, it is time to pause and reflect on our leadership and the intentionality we bring to our work. The excerpt below is from my dissertation.

Many studies have been conducted on the general subject of leadership. In most of the literature written, the following elements can be recognized as central to the subject: “Leadership is a process; leadership involves influence; leadership occurs in groups; and leadership involves common goals” (Northouse, 2010). Kotter (1990) stated that “effective leadership produces useful change” (p.103), whereas “more change always demands more leadership” (p.104).

Results from survey data collected and analyzed at the Cutter Consortium since 2001, seven habits were clearly identified that 21st-century technology leaders practice each day. The list includes both processes and outcomes; "business technology leaders build business scenarios; track technology that matters to business; identify business pain and pleasure; organize adaptively; manage infrastructure cost-effectively; communicate well and often; and market" (Andriole, 2007, pp. 68-71).

It is important that the CTO keep in mind the key job of education — teaching and learning: a leader as servant perspective (CoSN CTO Council, 2004). Servant leadership stresses that leaders should be attending to the concerns of their followers and should empathize with them; they should take care of them and cultivate them (Northouse, 2010). Hall (2008) described three types of leadership archetypes in technology leadership: Sage, Sensei, and Oracle.

- The Sage focuses on processes and policy, accomplishing and assigning critical tasks. The Sage is often perceived as ego driven, decisive and directive, and enjoys being recognized.
- The Sensei focuses on balanced approaches (strategic and tactical), building capacity and coaching or modeling. The perception of The Sensei is that of an engaging and pragmatic facilitator who enjoys seeing the staff being recognized for their efforts.
- The third archetype is the Oracle: philosophical and conceptual, a cultural change agent, strong with building relationships (internal and external). Oracles are often perceived as indecisive since they only give advice and can appear to be disconnected since they delegate all duties and responsibilities.

A CTO performs a vital role in district-wide planning and goal setting. In this situation, a valuable CTO is one who is comfortable functioning as both a change agent and a consensus builder (CoSN CTO Council, 2004). Leaders will enhance their efficacy if they are constantly working on the five components of leadership with energy, enthusiasm, and hope: if they pursue moral purpose, understand the change process, develop relationships, foster knowledge building and sharing, and strive for coherence (Fullan & Ballew, 2004). A CTO in K-12 education must be a capable administrator, an experienced educator, an effective com-

“One key to successful leadership is continuous personal change. Personal change is a reflection of our inner growth and empowerment.”

— Robert E. Quinn

CetPA President Julie Judd, Ed.D. is the Chief Technology Officer at the Ventura County Office of Education. She can be reached at Julie.Judd@cetpa.net.
First, I’d like to say “thank you” to all the dedicated CETPA members. Your commitment to CETPA has helped us grow steadily over the past several years. Your honest feedback and consistent information sharing has helped the Board of Directors and the staff define a clear path for growth. The success of our programs and partnerships allows us to continue to improve our organizational capacity. These improvements include additional staff and better membership systems that will help the excellent communications and relevant resources grow even more.

Earlier this year, the Board made some strategic decisions that will positively affect members, as well as attract new members. We are already in the first stages of big changes to our website, membership system, and the listserv.

Most associations like CETPA use an Association Management System (AMS) and Content Management System (CMS). The combination of these two systems allows members to do all tasks online such as join and renew, find and download resources, get information on events and register for them, and find resources from other organizations. The system that CETPA has been using for the past few years has had limited capability and has caused a lot of manual labor for staff, so earlier this year we began a search for a new system. We spent several weeks working on an RFP and going through demonstrations and discussions with vendors. I am sure you all can relate to that!

We wanted to be sure that the new systems were easy to use, stable and could integrate with other systems in a meaningful way to save time and labor. Moore’s law was in full force with AMS/CMS systems over the past few years and we saw a big improvement in capabilities and integration.

We also wanted to be sure to add end-user capabilities that were needed such as being able to connect with other members, Regional Group communities with updated capabilities for the chairpersons, uploading documents and posting jobs, and better event calendar management.

In addition, we are well aware that the EdTech listserv has been the life blood of our membership and one of the most valuable resources we provide. We’ve stayed with the Lyris system since the early 1990s because of the convenience of receiving messages as emails directly into your inboxes and being able to respond directly from there as well. Other systems didn’t have that capability until recently. But, the Lyris system is limited in its archiving and tagging capability and we cannot store documents. You, our members, have been asking for capabilities such as the ability to tag messages in a meaningful way so they are searchable, store documents such as RFP, project plans, and job descriptions and have the option to receive text messages and respond directly in your preferred way.

We’ve made the decision to switch to an AMS/CMS system called Your Membership. It is priced fairly and is a part of a larger organization called Community Brands, which provides many solutions for nonprofits. So, it is stable and will continue to improve. We have begun training, data analysis, and the website redesign. The new website will give members more special access and resources as we build the member pages. Regional Group chairs will be able to create events for their meetings that will allow for registration, agenda management, and will post to the calendar. Chairs (or their designee) will also be able to manage their own webpage for the group and post pictures and other information. Additional information gathered from members will help the Board learn more about our member base and its needs.

What we found was that most AMS/CMS systems have limited online community capability like the listserv. Most are integrating with a product called Higher Logic. This system is currently being used by organizations like ISTE and integrates easily to other systems through APIs. It is very robust and has many capabilities that members will enjoy. So, we plan to convert from Lyris to Higher Logic this summer as well.

We will launch the new sites in mid-August. You may need to reset your password, but don’t worry, you won’t be required to do anything else at the busiest time of year! We will be encouraging you to update your profiles and play with the new systems and we will provide guidance along the way. The Lyris system will remain until we are sure we have all the bugs out of the new system, so your communication doesn’t get interrupted.

As always, we appreciate your patience and feedback as we make this transition. We are very excited to be moving forward with these new systems. We will keep you informed as we make progress!
Technology can have a significant, positive impact on learning, but only if teachers can control the technology - not the other way around. FileWave is a single management solution for apps, devices, and configurations for Mac, Windows, and mobile, giving IT the ability to proactively and automatically provision and maintain every device. And with FileWave Engage, teachers have a simple, intuitive way to manage their classroom needs, without becoming IT technicians themselves.

For schools, FileWave increases visibility, reduces complexity, improves security, and enables learning.
IF THIS IS YOUR FIRST TIME AT A CETPA CONFERENCE, JOIN US FOR AN OPENING SESSION WITH BOARD MEMBERS, STAFF, AND OTHER VETERANS TO GET THE INSIDE TRACK ON WHAT MAKES US UNIQUE.

BY LAUREL NAVA
THIS YEAR OUR MAIN KEYNOTE SPEAKER WILL BE STEVE “THE WOZ” WOZNIAK!
DON’T MISS THIS CONVERSATION ON WEDNESDAY AFTERNOON.

LAUREL NAVA JOINED CETPA IN 2017 AS DIRECTOR OF EDUCATION AND EVENTS. PREVIOUSLY, SHE SERVED AS A PROGRAM ASSOCIATE FOR THE CALIFORNIA COMPREHENSIVE CENTER AT THE NONPROFIT ORGANIZATION WESTED, WHERE SHE PROVIDED THE CALIFORNIA DEPARTMENT OF EDUCATION (CDE), STATE BOARD OF EDUCATION (SBE), AND LOCAL EDUCATIONAL AGENCIES WITH PROFESSIONAL DEVELOPMENT, PROCESS IMPROVEMENT/IMPLEMENTATION, AND EVALUATION SERVICES. SHE CAN BE REACHED AT LAUREL.NAVA@CETPA.NET.

T he 58th Annual Conference, held this November 13-16 in Sacramento, marks my first full year as Conference Director at CETPA. No pressure, right?

My background in planning education events harkens all the way back to TechEd in 1999, when some of our biggest exhibitors were AOL and Compaq. It’s striking—and refreshing—to see the level of focus the CETPA Board of Directors has on prioritizing the interests of the CETPA community when planning this flagship event. I’ve participated now in dozens of meetings and the key question is always, “How will this (fill in the blank) support our LEA attendees?”

To that end, a major priority we’ve been working to implement since 2017 was a reduction in registration fees for our education community. We anticipate the cost of travel will continue to outpace annual inflation, and that will make it harder each year to secure approval to attend the conference that you consistently report being one of the most valuable professional development opportunities available each year.

We conducted an extensive analysis of the costs to produce the conference and a comparison to other events. If we hadn’t adjusted the price, our conference would still be one of the best deals around since we include so many refreshments in the overall fee: an opening reception, snacks, two lunches, and a hot breakfast. Each year, labor and food costs rise by at least 7 percent and yet our fees have remained as low as possible.

But, it still hasn’t been enough, since our analysis shows that many school districts can only afford to send staff every other year—or every third year. We want to do our best to make our conference an experience that benefits you and your entire team. To that end, the Board of Directors prioritized instituting two types of registration fee discounts.

TEAM DISCOUNTS

Our two new categories of team discounts allow for a small team of two to four members to receive $150 off of registration when booking together. This amount rises even higher, to a discount of $170, when bringing a team of five or more staff. We hope this helps your ability to bring those who wouldn’t normally attend a technology conference, but who are critical in supporting your LEA-wide vision for technology—your Assistant Superintendent of Educational Services, your CBO, or even your Superintendent.

EARLY BIRD DISCOUNTS

Our second class of discounts provides a significant incentive for registering early. The first Early Bird discount of $100 was valid through July 15, a date our Board of Directors chose in case you needed to secure district approval in the new fiscal year. We now have a second Early Bird discount that reduces registration by $50 that is valid through September 15.

We’ve also posted on our website a summary, “Tips for Getting Approval,” of the ways in which we know our conference is one of the best values around. We hope this document is something you can attach to your travel request as another way to assist in securing approval to join us in November.

Again, these discounts were conceived of and implemented by our Board of Directors, so if you see Eric, DeWayne, Jeremy, Brianne, David, Julie, Rolland, Tim, Lorrie, Phil, Peter, or Steve at the conference, pull them aside and tell them “thank you!”

TRADITION AND INNOVATION

Our annual conference is always a combination of tradition and innovation. Each year, we look forward to the features that make our conference experience unique: an exhibit show that doesn’t conflict with breakout sessions, “crowning” our Chief Technology Officer Mentor Program graduates, the “Best Ever” golf tournament and, of course, the invaluable time to connect with your peers face-to-face.

This year, our tradition of innovation is taking another leap forward in several ways:

YOU ASKED, WE DELIVERED…THE WOZ

Year after year, we’ve been hearing requests for us to secure Steve Wozniak as our main keynote—and we did it! Join us Wednesday afternoon for a conversation with The Woz, facilitated by
How many times has this happened to you? You’re just getting settle in at the office and news breaks of yet another security flaw in a system upon which your organization relies? Maybe you’re catching up on the industry news only to read about some sneaky hack that damaged an organization’s reputation and exposed security weaknesses you know also exist in your LEA? It’s enough to want to make you bury your head in the sand and pretend that security incidents aren’t going to happen to your LEA. I mean, your LEA isn’t a bank, right? It’s not like you have valuable trade secrets, or critical national security documents on your network.
Well, unfortunately, we all know that not true. School districts and COEs are targets and, oftentimes, easy ones, precisely because we lack the resources of larger agencies or private enterprises. The truth is that savvy, malicious actors know that LEAs maintain valuable information, like student data and employee financial records. Furthermore, LEAs have extensive IT infrastructure sought after by cyber-criminals so that they may exploit our resources in order to commit other crimes, or generate ill-gotten gains (i.e., crypto-mining, botnet recruitment, etc.). Not only are we up against lone hackers, and the occasional curious but misguided student, we now face groups of organized career criminals motivated by billions of dollars in easy money.

It’s also moments like these where we look for solutions. It’s only human nature to try and find a quick and painless fix where we can “set it and forget it” and solve our security problems. Well, that is exactly how the marketers and sales teams of cybersecurity technologies companies want us to feel—scared, confused and desperate for something that will make us, and our users feel safer. I have no doubt that this is how many big sales of security solutions have been made over the years. It’s certainly a powerful marketing strategy, but we all know it’s not an effective or sustainable way to secure our environments. The fact is that no single security tool, or even collection of systems, can sufficiently protect our ever-changing and...
increasingly complex networks. We should be skeptical of vendors selling comprehensive solutions, throwing around jargon like “next generation,” “cloud-based machine learning,” and “real-time threat analysis.” Sure, they sound sexy, and it’s very appealing to think you’ve got an army of AI-enabled cybersecurity analysts in the cloud watching your network. But really, if the tools were all we needed, we’d all have a lot more free time, and probably fewer stress headaches, right?

When it comes to improving your organization’s security posture, it is helpful to borrow a concept from education: it’s a process, not a product. Or, more accurately, it’s about the processes, not the products. As IT professionals, we need to focus on developing comprehensive security processes, based on industry standard frameworks, so that cybersecurity best practices are built into our environments and incorporated into our standard operating procedures. Its processes that, when effectively developed and implemented, change an organization’s culture; and developing a culture of security is the key to truly improving an LEA’s security posture.

So, where do we start when we want to develop our organization’s security processes? Lucky for us a lot of very smart people have created cybersecurity frameworks. Cybersecurity frameworks are designed to help organizations create and sustain improved security processes. Maybe you’ve heard of the International Standards Organization (ISO) 270001 standard or the National Institute of Standards and Technology (NIST) Cybersecurity Framework? Both are excellent examples of cybersecurity frameworks; but let’s face it, they make for challenging reading and can be daunting to implement. This is why the CETPA CCTO program requires that candidates study the Center for Information Security (CIS) Controls. The CIS Controls take the best practices from both the NIST and ISO frameworks and distill them into a prioritized, easy-read document designed to assist IT teams in developing security processes.

The CIS Controls break down the best practices of information security into 20 control groups. Control groups consist of a set of prioritized actions, called sub-controls, regarding specific IT resource management topics that—when implemented—will make marginal improvements to an organization’s security posture. The more actions implemented, the greater the security gains. While not all the actions are easy, the CIS Controls are designed to maximize quick wins by reducing complex problems to smaller, more manageable steps. The first six controls are considered basic and excellent areas to start your process development. The next 10 are foundational and build upon the basic controls. The last four CIS Controls are organizational and provide recommendations for testing your implementation of the first 16 controls and include steps for developing an incident response plan and educating your users in the fundamentals of cybersecurity.

What’s so attractive about the CIS Controls is that the document’s structure lends itself to process development. It’s an easy-to-read list of the processes needed to ensure you’re taking the steps to secure your environment. It helps you identify the security and IT management tools you have in place to see where they’re being used to meet the requirements of a sub-control. This allows you to put the tools into the context of a process and properly evaluate the security value they add. It’s also great document to review during IT staff meetings. You can choose a single control to review per meeting, check to see how your organization measures up, and choose specific sub-controls to improve upon.

Let’s say that you’re already very familiar with the CIS Controls, or have implemented some other cybersecurity framework at your organization. Excellent work! You’re doing great things at your LEA! But, how are you handling incident response? Unfortunately, even when you’ve developed a robust set of information security processes, things happen. Processes break down and tools get beat. Suddenly, you find your environment compromised. How
do you handle it? Do you have an organized method for dealing with threats? One where you can follow a series of steps that allow you to produce a comprehensive document you can use to assure your stakeholders the issue has been properly addressed? If not, you may be interested in these incident response process guides and the incident response and data privacy procedures form.

Let’s start with the incident response process guides. These forms cover 14 of the most common security threats you’re likely to encounter. Who hasn’t experienced some form of malware in the last five years? Or, maybe your LEA has had a laptop stolen? Or, just maybe, someone in your organization has recently been phished? Well, now you have a set of checklists you can use to guide and document the remediation process. The process guides linked in this article were developed by Secureworks in collaboration with the San Bernardino County Superintendent of Schools and were designed to be the primary working documents for incident response teams when dealing with security threats. They provide step-by-step guidance, allow for the delegation of duties and the systematic documentation of findings. They are a great resource for coordinating teams when dealing with large scale, complicated threats, and for individuals dealing with small but potentially dangerous lapses in security. While they are very detailed in their scope, they’re also customizable. They can be modified in ways that will make them more applicable to your organization. Additionally, implementing the process guides will give you a head start in complying with the CIS Control 19: Incident Response and Management.

As great as the process guides are for dealing with individual security incidents, they are made even better when combined with an incident response summary document, like the one Dr. Carl Fong and his team at the Orange County Department of Education released during last year’s CETPA Annual Conference. Lucky for us, OCDE turned their excellent work into a template that can be modified and applied to any LEAs incident response process. This template can be used similarly to the process guides discussed above, but it lacks a threat-specific step-by-step checklist. However, when coupled with the process guides, the OCDE template serves as very effective summary document; one that not only provides enough detail to inform IT leadership, but can also be to communicate with executive teams, third-party consultants and, if necessary, law enforcement. The OCDE incident response guide bridges the gap between the technical identification and remediation detailed in the process guides and the summary-style communication needs of non-technical stakeholders and outside support teams. Moreover, it provides an opportunity the response team describe how the lessons learned during the incident response process will be applied to make the organization safer and less prone to similar incidents in the future.

Of course, no information security improvement process is complete without a communication and education effort. In fact, user education is a component of every major cybersecurity framework, and it is specifically addressed in the control 17 of the CIS Controls document. I’m sure the idea of developing and maintaining a user education program sounds painful, but fear not, our CETPA colleagues and TAPD friends have developed materials and resources that will help you kickstart your user education process. Last year, Max Eissler, CTO at Martinez Unified School District, shared the slide deck he uses to provide annual cybersecurity best practices trainings for the Martinez staff. The presentation is detailed and covers the majority of points users need to know in order to improve the organization’s overall security posture. It is an excellent template for those IT leaders looking to introduce their users to the fundamentals of cybersecurity. CETPA also includes it in the list of resources for the CCTO cybersecurity classes, and it’s in use at SBCSS in a pilot training program.

For organizations looking for something more formal, TAPD is offering their new and improved Cybersecurity Education Program (CEP). For those of you unfamiliar with the CEP program, it’s a comprehensive set of end-user focused lessons designed to educate individuals about their personal online practices and their professional cybersecurity responsibilities. The program is delivered via the Canvas LMS and provides a structured, content rich means of delivering effective cybersecurity education at no-cost. Thousands of K20 LEA employees have completed the CEP, and with the new content refinements and user administration improvements, it’s compelling program that will add value to any user education process.

continued on 16
Perhaps you’ve noticed a sub-theme running through this article? Yes, it’s about putting processes before products when it comes to cybersecurity. But you’re a CETPA member, and if you’re not already doing all of this and more, no doubt that you’re taking whatever small steps you can to develop your own portfolio of processes to improve your LEA’s ability to withstand and resolve security threats. That brings us to the sub-theme: the more we collaborate and learn from each other, the more secure and more capable we become. CETPA and TAPD offer some great cybersecurity resources, but there are other organizations we can and should look to for help. If your organization is not already a member of MS-ISAC, consider joining it as soon as possible. MS-ISAC stands for the Multi-State Information and Analysis Center. It’s a collection of state, local, territory and tribal governments that have pledged to work together to identify and address cybersecurity threats. It costs nothing to join and membership entitles your organization to a number of benefits, including timely threat notifications, relevant cybersecurity news, professional incident response assistance, and the monitoring of network activity that may indicate a breach or the presence of malware. I also suggest signing up for alerts from US-CERT, the United States Computer Emergency Readiness Team. US-CERT provides much of the same information as MS-ISAC, but often produces urgent warnings before MS-ISAC. Additionally, US-CERT allows agencies to report incidents and will provide incident response guidance in the event of a security emergency.

THE FACT IS THAT NO SINGLE SECURITY TOOL, OR EVEN COLLECTION OF SYSTEMS, CAN SUFFICIENTLY PROTECT OUR EVER-CHANGING AND INCREASINGLY COMPLEX NETWORKS.
WHAT AN EXCITING TIME IN EDUCATION! IT'S ENERGIZING TO SEE THE VARIOUS FORMS OF INNOVATION OCCURRING IN CLASSROOMS, SCHOOLS AND DISTRICTS THROUGHOUT CALIFORNIA. POSSIBLY MORE SO THAN IN ANY OTHER TIME IN EDUCATION, STUDENTS HAVE INCREASED ACCESS TO COMPUTER TECHNOLOGY. DIGITAL CURRICULUM, AUTHENTIC LEARNING PRACTICES, AND THE INCREASED ACCESS TO THE INTERNET ARE A DRIVING FORCE FOR 1:1 STUDENT COMPUTER PROGRAM ADOPTIONS STATEWIDE.

THE INVESTMENTS ARE NOT ONLY IN COMPUTER TECHNOLOGY AND NETWORKS. SCHOOLS ARE ALSO INVESTING A CONSIDERABLE AMOUNT OF RESOURCES PREPARING THEIR TEACHERS IN THE IMPLEMENTATION OF SOUND INSTRUCTIONAL TECHNOLOGY STRATEGIES. FOR SOME AGENCIES, THE RAPID PROLIFERATION AND AVAILABILITY OF “TESTING DEVICES” IS FORCING LOCAL EDUCATION AGENCIES (LEAs) TO ADOPT MODERN TEACHING PEDAGOGY BETTER SUITED TO THE INDIVIDUAL NEEDS OF THEIR STUDENTS. AS A RESULT, THIS IS LEADING SOME TEAMS TO THE CONVERSATION OF THE EFFICACY OF TRADITIONAL APPROACHES TO PROFESSIONAL DEVELOPMENT. THE “SIT AND GET” APPROACH TO PROFESSIONAL DEVELOPMENT MAKES IT DIFFICULT FOR MOST PEOPLE TO RETAIN NEW KNOWLEDGE. THE CONFIDENCE GAINED FROM TRYING, FAILING AND OVERCOMING (PROBLEM-SOLVING SKILLS) IS MOSTLY ABSENT IN THAT SETTING. THIS IS QUITE CONTRARY TO THE 21ST-CENTURY SKILLS THAT ARE KEY TO CREATING ENGAGING AND STRUCTURED CLASSROOM EXPERIENCES AND ACTIVITIES. AT EL CENTRO ELEMENTARY SCHOOL DISTRICT (ECESD), IT BECAME APPARENT THAT A CHANGE WAS NEEDED.


SUCCESS IN
SINGLE SIGN-ON

By Tam Nguyen

Tam Nguyen is the Director of Information Technology at Orange Unified School District located in Southern California serving 29,000 students at 40 school sites. He has been in K-12 Information Technology for 16 years and recently completed the CETPA CTO Mentor Program in 2017.

Photo by Linda Xu on Unsplash
As information technology (IT) professionals, few solutions can have as a profound and direct impact in the classroom as simplifying the login process for teachers and students. Teachers and students rely on an ever-growing number of instructional applications and, in turn, face an increasing number of login portals, usernames and passwords. As a greater number of applications are cloud hosted and as a result require remote authentication to directory services by utilizing protocols such as Google authentication, Microsoft Azure authentication, Learning Tools Interoperability (LTI) integration, or Security Assertion Markup Language (SAML) Identity Providers (IdP). While initially daunting, the need for authentication provides an opportunity to design a robust directory-based authentication infrastructure to simplify administration, increase security, and recapture instructional time in the class. A well-stratified single sign-on strategy encompassing multiple computing platforms and environments can provide benefits such as:

- a single username and password for many applications
- a consistent, recognizable login portal and branding across all device platforms such as Chromebooks, PCs, and iPads
- greatly increased ability to secure the network and learning environments
- recaptured instructional time in the classroom
- a consistent computing environment over disparate platforms including BYOD devices
- ease of access to instructional and business resources

Although single sign-on is often referred to as one solution, it is important to note that it is a collection of technologies which provide a desired end-user login experience that encompasses multiple systems such as directory services, identity providers (IdP), network and firewall, security protocols, and application portals. Combining the messaging of these solutions into single sign-on helps to simplify communication and marketing to stakeholders in the district.

The Orange County Unified School District (OUSD) serves 29,000 students throughout 40 school sites in the Southern California area. The district’s philosophy of personalized learning extends to the computing environments, supporting an equal number of iPads, Chromebooks, and PC student devices. Bring Your Own Device (BYOD) access at all sites further increases the number of different devices a teacher is challenged to instruct on. The district employs 3,500 employees utilizing various business applications. This posed a challenge of implementing a unified single sign-on strategy which could support multiple computing platforms, learning environments and business systems.

Working in collaboration with other districts and drawing from their experiences, the OUSD implemented a single sign-on strategy based on common technologies available to K-12 agencies. This article shares single sign-on considerations for an environment which requires Active Directory access for PC devices, as well as iPad and Google environments.

**CHANGING THE WAY WE LOG IN**

The biggest challenge in implementing a single sign-on strategy is to produce buy-in from various stakeholders that a shift in the way we log in should be made for the benefit of staff, teachers and students. A case can be argued for reducing the burden of remembering credentials while addressing security concerns such as well known password schemes or the inability to reset passwords across all platforms. A single sign-on prompt, which is presented consistently across all platforms a user encounters, will reduce confusion, the requirement to look-up various passwords and stress. In addition, the district stands to significantly improve its security posture by reducing the use of written passwords, and the ability to reset a user’s account instantaneously across multiple applications.

Beyond these benefits, a single sign-on application portal can be catered to provide applications based on a user’s role, location, grade or section. This presents only the applications that pertain to the user or the user has access to.

**BRANDING YOUR SINGLE SIGN-ON CREDENTIAL**

An important consideration for the success of our implementation is to brand the concept of single sign-on. Branding allowed for our technical support staff, trainers and teachers to refer to a username and password credential by name so that students can quickly identify and recognize. Our single sign-on account is referred to as the OUSD single sign-on account. In the same fashion, we branded our application portal ‘MyOUSD’ and prompts the user to utilize their OUSD account. Whenever single sign-on credentials are utilized, the application would refer back to the same login portal with consistent branding.

**continued on 20**
SINGLE SIGN-ON continued from 19

A familiar login prompt also provides confidence to the user that they are entering their credentials in a secured location. Users are eventually conditioned to question unfamiliar login prompts and helps to increase security awareness amongst staff and students.

ACTIVE DIRECTORY FEDERATED SERVICES VS. GOOGLE G SUITE DIRECTORY VS. SHIBBOLETH

Microsoft Active Directory Federated Services (ADFS) feature support began with Microsoft Windows Server 2003 R2 as an additional download. ADFS is now in its fourth iteration and has a strong market share in K-12 due to ease of integration with Microsoft Active Directory. After an initial implementation, ADFS requires an insignificant amount of administrator training for IT departments familiar with maintaining Active Directory accounts.

For a comprehensive Google G Suite and Chromebook environment with minimal Microsoft Active Directory infrastructure, G Suite Directory as a SAML identity provider could be a better authoritative directory source. G Suite SAML services is a recent offering, and as such K-12 community-sourced support could be more difficult to come by.

Those looking for a self-hosted alternative to ADFS can utilize a Shibboleth-based open-source SAML server such as Gluu which is popular with Linux savvy higher education organizations. Shibboleth is also commonly utilized by service providers who can host an identity provider service on your behalf and synchronize to your directory service of choice.

APPLICATIONS WHICH ONLY SUPPORT GOOGLE AUTHENTICATION

While most instructional applications and business systems directly support ADFS/SAML single sign-on authentication, there is a significant number of applications which only support Google authentication. Connecting Google Authentication to ADFS allows for an application that requires Google Authentication to utilize the same single sign-on credential and login experience.

PowerSchool Learning (formerly Haiku Learning) Learning Management System (LMS) utilizes Google Authentication as the only single sign-on option. To utilize the same single sign-on credential, PowerSchool Learning utilizes Google Authentication. In our environment, PowerSchool Learning links users to the Google login portal which, in turn, utilizes Microsoft ADFS SAML authentication and presents the same consistent OUSD login portal.

MICROSOFT ACTIVE DIRECTORY FEDERATED SERVICES AND GOOGLE CHROMEBOOKS

With over 20,000 PC and Chromebook devices in use by students, interoperability of usernames and passwords with PC and Chrome devices was critical. The OUSD team utilized Microsoft Active Directory (AD) as the authoritative directory database of user credentials and added Microsoft Active Directory Federated Services (ADFS) to provide SAML Identity Provider (IdP) functionality. ADFS IdP allows the Google environment to connect and authenticate to Active Directory. The result is a consistent username, password, and portal branding even on a Google Chromebook device.

GROUPING BY AD AND ROSTER DATA

To present users with only the applications they can single sign-on to, users are containerized into logical groups for resource assignment. Utilizing an automation partner, Tools4Ever, staff and student groups are continuously synchronized into Active Directory groups utilizing a consistent scheme. Applications are then assigned to the appropriate user type, location, grade, or role.

Students utilize a standard scheme of [STU]-[LOCATION]-[GRADE] where all fields are three characters. Employees are synchronized into a similar scheme of [EMP]-[DEPARTMENT]-[ROLE] where all fields are also three characters long. Various systems utilize these standard continuously synchronized AD groups, including single sign-on portal platforms.
Beyond Active Directory groups, application portals such as Classlink can now ingest IMS Global’s OneRoster standard data directly from a Student Information System (SIS) to provide granularity down to the class section.

**FORM FILL FOR Legacy APPLICATIONS**

Over the past several years, application vendors have worked diligently to implement single sign-on functionality in their product largely from customer demand. The emergence of new protocols and interoperable authentication frameworks, such as OAuth and LTI, have made this task more accessible to smaller software developers. However, there are software vendors who have not had the resources to develop Single sign-on for their application.

A single sign-on application portal vendor, such as Classlink, can be an intermediate solution by providing browser plugins and native apps to form fill credentials where true single sign-on is not available. This provides the same simplified login for legacy applications until they sunset or implement single sign-on functionality.

**CLEVER DATA INTEGRATION AND SINGLE SIGN-ON**

Utilizing an IdP and another single sign-on application portal does not preclude a district from leveraging other data integration services. Clever provides a tremendous value to districts by providing a simplified method of rostering student data into certain applications free of upfront costs to districts and can be utilized in conjunction with other data integration methods to complete the single sign-on strategy. Some platforms exclusively utilize Clever as their user provisioning and single sign-on platform.

If you do not utilize Clever’s single sign-on application portal offering, applications provisioned with Clever can be integrated into your district’s application portal with single sign-on functionality by utilizing Clever’s single sign-on URL. A user would authenticate via SAML to your District’s application portal, click on the application specific Clever single sign-on URL, be redirected to Clever, who then authenticates the user to the final application by passing the appropriate SAML token.

**DATA INTEGRATION WITH JUST IN TIME PROVISIONING**

A unique opportunity for true Single sign-on application is the ability to create user accounts on the fly without consuming scripting, programming, or data integration resources. Just-in-time provision allows for certain applications to read metadata sent from a SAML IdP to create users appropriately in the target application. Overdrive digital library can build an account on a first single sign-on login based on data provided through SAML authentication such as AD Group, AD Username, and parsing the description field for more information such as student grade.

**SINGLE SIGN-OUT**

The failure of single sign-out can negate the time saved by a good single sign-on solution. Some applications hold on to the authentication token despite the user initiating a log-out. In a shared device environment, this can result in a time-consuming process of signing out of the previous student’s account. Remediating this situation requires configuring special sign out configurations in our application portal to ensure that any intermediary single sign-on applications did not hold onto authentication tokens preventing successful sign-out.

**RESULTS**

Originally, all existing links and resource pages were available concurrently with the launch of the MyOUSD single sign-on portal. In our first year of implementation, unique logins consistently grew from zero to 10,000 unique logins per day in a six week period as users voluntarily utilized the application portal. Moving forward to our third year, OUSD totaled 31,448 active users out of 32,500 possible staff and student accounts. Conservatively estimated, OUSD students save 2,500 hours of instructional time per month on just the top six instructional applications alone.
CHANGE IS HERE...

By Rick Hassler

Change is here, but it is not a bad thing. Like the hit series Game of Thrones with the tag line “Winter is Coming,” many educators have said for years, “Change is coming” with an ominous tone referring to the infiltration of technology into the classroom as threatening as the coming of winter.

It is beyond cliché to declare that we need to move our classrooms into the 21st century, to transform our classes to student-centered environments where the 4 Cs (Critical Thinking, Communication, Collaboration and Creativity) are the norm and personalized learning is the expectation. I would go further by stating we must transform not only our classrooms, but our work environments to promote problem-solving, collaboration and creativity to support the success of those we serve. Yet, we make things so complicated when, in essence, preparing to evolve is as simple as answering the question, “How am I changing my practice or helping my staff to change theirs?”

As a CTO in preparing your district staff for this season of change and moving into 21st-century effective support units, you might consider the following questions:

- Do you allow your staff to work freely to solve-problems or create situations that will require use of higher-level critical thinking?
- Do you use or develop systems or structures that require staff to collaborate to complete projects, solve-problems, analyze data and monitor progress?
- Do you permit staff to choose different pathways to accomplish project goals?
- Do you celebrate staff taking initiative or use of creativity?
- Do you allow your staff to work freely to solve-problems or create situations that will require use of higher-level critical thinking?
- Do you support staff by providing time or resources to keep up on the latest technology?

In considering these questions, since topic here is change, as a CTO making use of the change management methodologies is paramount in measuring, monitoring and supporting the change process. Providing structured approaches to changing staff practices can really make a difference in successfully transforming your staff to be creative, motivated, problem-solving revolutionaries.

There are several models of change that can be deployed. One of the models I found easy to implement is the ADKAR® model based on Prosci’s research-based change management mythologies. In sum, the ADKAR model is based on five components/stages of change.

A – AWARENESS: As a CTO your role is to provide an awareness for the need to change. You create an urgency for change by illustrating that the status quo is a burning platform and without change horrible outcomes are inevitable. For example, in order for a person to quit smoking they must understand that smoking is not good for them.

D – DESIRE: Once your staff understands there is a need to change, you then must instill a desire to change. Even though an individual understands there is a need to change, like a person understanding smoking is bad, without the desire to change, the person will continue to smoke.

K – KNOWLEDGE: Desire is not enough to create change. As a leader, you will have to provide your staff the knowledge to support them in altering their behaviors. A person can have the awareness and desire to stop smoking but has no chance of success unless they have the knowledge of the solutions that will help them from nicotine gum to patches to other techniques.

A – ABILITY: Understanding how to change and having the ability to change is a critical nuance of the change process. A person can have the knowledge of the techniques to quit smoking but not have the ability to apply them.

R – REINFORCEMENT: After staff has the ability to change, there must be constant reinforcement of new practices to create new mindsets. Without this last component of change, a person that quit smoking could return to the practice.

Change is here! We can either continue with our traditional practices and not upgrade ourselves to make it through the winter, or we can choose to adapt and enjoy the benefits of 21st-century leadership by transforming our staff into a disruptive force of innovation through the implementation of structured change methodologies.

Rick Hassler is the Director, Educational Technology and Support for the Baldwin Park Unified School District. An educator serving public schools for 20 years, he brings expertise from the leading edge of instructional and informational technology integration and blended learning. As part of his formal education, he obtained a Master’s of Arts degree in educational technology, and a Master’s of Arts degree in educational leadership. He can be reached at RHassler329@BPUSD.NET.
INFUSING THE MAKER MINDSET ACROSS A DISTRICT

BY TRACI BONDE

The maker movement, which began in the Bay Area of California roughly 12 to 15 years ago, has become a hot term in education as recent as Fall 2015. Some see it as the next potential silver bullet to transform an age-old institution. Others see it as the flavor of the week by over-enthusiastic teachers and administrators who are always looking for the next thing. The maker movement is just that—a movement. The spirit of the maker movement is a revisiting of an age old concept. Makers, a.k.a. entrepreneurs and inventors, are not new to our culture. Inventing brought our country and others to the Industrial Age. Inventing also brought the world to the Information Age. In schools, makerspaces are becoming all the rage as library media technicians reinvent their room of books to buzzing spaces with tinkering, hands-on activities, and a spirit of invention (A Librarian’s Guide to Makerspaces: 16 Resources).

Teachers that do not have real estate for a full makerspace have mobile maker carts full of recycled materials, Legos donated from friends, scissors, and glue guns allowing students to create real-world prototypes solving problems. I am a firm believer that the maker movement is a mindset, rather than a station or a library destination. The spirit of innovation, creativity and collaboration drive the mindset that encourages both our students and staff to take risks, to be innovative, and to explore improving the world around them.

What this may look like for your classroom, your school or district culture depends a lot on your students. Are they excited about the idea of being makers? Do they understand the value and the importance of risk-taking and failure? Are they encouraged to own their educational roadmap and take risks? To get started, 3D printers are great when you have technical prowess and money. What do you do with students who are in poverty? How do they get to be makers? I propose you introduce low cost and low-tech projects that can be done at home or at school. Try a Saturday three-hour soft launch for your school, or learn how open school approached three M&M: Makers & Minecraft EDU. What is the website?

Or, if you plan on trying in your classroom/library, here’s a low-cost project idea: popsicle stick trebuchet with spoon launcher (see above image). Begin creating your materials list for one to two maker projects that will occur in your classroom in the fall (trimester/semester 1).

Create a floor plan of where this may occur in your classroom or be creative and do it outside!

Fresh air breathes creativity. Here are some ideas. Keep it small and start with yourself. What is your favorite hobby/activity?

- cardboard rube Goldberg contraption (just cool!)
- popsicle stick trebuchet (physics lesson)
- make your own butter (you will need bread for spreading it on!) (chemistry)
- scratch gaming project (writing/math)

Create or add a project lesson plan to your Google classroom/drive (or shared folder) as an assignment. (Start with one or two assignments).

Begin a wish list and longer term project list for the year, but start small. Try one maker project a month and create a ‘donors choose’ fundraising campaign if your materials list is expensive. Check out the following links:

Now the Money: http://www.donorschoose.org/
Building a Trusted Learning Environment with CoSN: California State Cohort

California Districts Pilot Program and Make Strides to Protect Student Data Privacy

Recently, CoSN sat down with Christy Johnson, Project Manager, ITS for the San Diego County Office of Education to talk about their work supporting San Diego school districts in their efforts to improve student data privacy protections.

How Did This Group of Different School Districts First Come Together to Form a TLE Cohort? Tell Us a Little Bit About Your Membership?

In January 2018, we begin notifying the CTO of San Diego County district and charter schools that we would be launching a pilot cohort in March. We leveraged CTO meetings, as well as direct email invitations, marketing flyers and our website to spread the word about the cohort. Of the initial five districts which showed interest, two districts made the final commitment. One of the districts supports a more urban demographic comprised of approximately 21,000 students, and the other is a more rural district, which supports approximately 5,000 students.

How Are You Leveraging the Group’s Knowledge and Resources to Help Each Other? What Role Has CoSN Played in Providing Leadership to This Cohort?

Despite (or perhaps because of) the rich diversity between the two districts, we’ve found it to be amazingly beneficial for the cohort members. It is not surprising to hear the two districts say to each other, “Hey, we’re already working on that. Here’s something to get you started.” CoSN has played a huge role in helping us get to the point where the cohort members can have these types of conversations. This includes providing the initial networking between us and other cohorts to talk through the logistics of running a cohort, to participating in our kick-off meeting, and even to the assignment of a TLE Seal mentor who has been invaluable in providing specific examples as well as to providing clarity on the Practice Areas that we are following.

What Would You Say Are the Greatest Benefits of Being in a Cohort? What Are Some of the Biggest Challenges?

The clear benefit to the cohort has been the collaborative nature of working to understand and fulfill the activities needed to earn the TLE Seal. Sharing a variety of experiences both within a single district (technical team members, CTO) as well as between the two districts has really helped them identify their strengths and opportunities for improvement in an honest fashion. In terms of challenges, we have not encountered them as of yet. These guys are dedicated to doing the real work back in their communities amongst, not only their staff, but the teachers and students that they support. If the cohort members were not as driven to be leaders in their districts, I could see that being a real challenge to the success of the cohort.

How Is the Group Staying Organized, Engaged, and Focused? Can You Share with Us What a Typical Meeting Looks Like?

Our cohort has elected to meet in person monthly at a county office of education facility central to their districts. By focusing on the topic for two hours with no distractions, we were able to methodically work through the practice areas to identify gaps and create action plans.

As the Cohort is Working Through the TLE Process, What Have Been Some of the Biggest Insights Gleaned? What Have Been the Biggest Struggles/Obstacles That the Schools Are Encountering?

Based upon our conversations, it became clear rather quickly that there is more work to earning the TLE Seal than originally anticipated. Whether this be from a system or process perspective, the cohort members had to take a moment to honestly and realistically look at their ecosystems to see how they measured up against the TLE standards. Fortunately, as we’ve worked through the practice areas, I think they are recognizing that a vast majority of the time, a plan is in place and incremental implementations are already in progress. Despite this, the repeated challenge seems to be around the topic of organizational buy-in to implementing a culture of cybersecurity as it relates to data security and data privacy. IT leadership can only go so far if the district leadership landscape is resistant to do so.

What Does Success Look Like for Your Cohort?

As a facilitator, I feel that we’ve already reached a certain level of success. By finding two districts willing to partner on implementing measures that support data privacy, it is a win for our county’s students. As a cohort, I’m pretty sure the guys would say that we are successful when both districts earn their TLE Seal. However, I’m also sure that they would say they are already successful due to the incremental improvements that are already in development based upon their participation in the cohort.

I have a broad-spectrum approach to IT as a result of working in the worlds of education (as a classroom teacher, curriculum devel-
I brought this experience to my current role at SDCOE, which includes both project management and cyber awareness program development.

TELL US ABOUT THE COSN TRUSTED LEARNING ENVIRONMENT.

The Trusted Learning Environment Seal is a mark of distinction for school systems, signaling that they have taken strong and measurable steps to help protect the privacy of student data. It is the nation’s only data privacy seal for school systems, focused on ensuring a holistic approach to student data privacy. For more information or to find out how you can apply for the Trusted Learning Environment Seal or to start a cohort in your area, visit TrustedLearning.org.
IT FEELS LIKE IT.

Government demands shape classrooms in ways the people making those demands often don’t anticipate or understand. That’s why they’re the ones making the demands instead of the ones having to implement them. If you’ve got to march in the band it’s better to wave the stick than carry the big drum and try to keep up. So, it follows that as the government waxes and wanes on things like standardized testing, the majority of American classrooms also change. I came into education as George W. Bush was pushing his No Child Left Behind program into the world in 2003. Seemingly, at least to me, at the same time, districts were moving toward more scripted programs. Part of the new teacher training that I underwent at my first position included a multi-day detailed course to learn to use the reading curriculum, which will remain unnamed here and forevermore. This training, summed up, went like this: ‘See how on page 38 of the teacher’s edition it tells students to do exactly this? Have them do exactly that. It will take 12 minutes. When those 12 minutes are up, move to the next item on page 38, which we have helpfully colored a different color so that you and your students can tell the difference. You’re welcome.’

This section will take exactly 15 minutes and 42 seconds. And so on.

Basically, I graduated from college so that someone who isn’t a teacher could teach me to read a textbook. And the district stuck to this program religiously. There was a woman whose job it was to visit classrooms around the district and make sure we were on the right page, doing the right thing, at the right time. This might sound like hyperbole, but I assure you it is not.

There was no lesson design for me that year. But I was a new teacher. At least the book gave something to follow. Now, I hated it after about three days, and I hated even more the pacing planning meetings we had to go to, but there it is. I didn’t design lessons. The district paid someone to do that. It sucked.

I moved schools and states and things were radically different. We still had a pacing plan but there was no human rabbit for us to keep up with. I began to slowly branch out and get more creative with my planning.

But what was happening in the other classrooms? Was everyone else lockstep like I was that first year? I assume so, we had a guard. Were they finding other ways around the pacing plans? I bet they were, I worked with some very talented teachers at that school. Still, the reins were tightly held. There were already teachers giving students projects to learn from, letting them choose their paths and passions, making it about the student and not the teacher. It isn’t new, it’s just coming back around, like a comet. It never really left, but it’s closer to the sun and it’s easier to see.

Over the years, control of my lesson design has loosened or tightened depending on the district, grade level, and school administration. Executive branch administration has had some impact on this as well, mostly as President Obama moved from “Race to the Top” to “Every Student Succeeds” and publicly stated that student freedoms were things his administration would encourage.

The current administration has made it clear they don’t have a strong vision for public education, so I’m not really sure what kind of pressures from above my superintendent and principal will be feeling. I hope ESSA doesn’t go away, but I’m not optimistic.

It seems, based on conference sessions and the current trend of educational articles, that teachers want to keep moving toward a more student-centered model of lesson design. Finding ways to incorporate student choice. Less
sage-on-the-stage and more guide-on-the-side. Whether this is new or just new again is up for some debate. To me, I get freer and more flexible with lesson design all the time. I’m constantly asking myself how I can integrate movement and technology into my lessons, even when there’s no obvious answer.

And there’s the big one; the big change that is new because it’s constantly evolving: technology. We’ve had educational technology for as long as we’ve had education, but it’s grown in scope, scale and flexibility. We’re able to do more than ever with the technology available and we’re able to get the technology into more and more students’ hands. Soon, eventually, even the most rural and low-income schools will be connected. This is the next great step in lesson design, no matter who’s in the office, at the end of the hall, or in DC. Teachers will continue to innovate and find ways to incorporate technology into our classrooms. Used correctly, this technology will allow for greater student choice and voice and it will allow for more making. Maybe going digital will eliminate the pendulum swing in more than clocks.

**CETPA CHATS WITH MEMBER**

**ERIC CALDERON**

**HOW LONG HAVE YOU BEEN IN YOUR POSITION AS CHIEF TECHNOLOGY OFFICER AT RIVERSIDE COUNTY OFFICE OF EDUCATION AND WHAT ARE THE SCOPE OF YOUR RESPONSIBILITIES?**

I have been at the Riverside County Office of Education since March of 2017 and it has been a whirlwind of learning and understanding the functions of a county office. I have been blessed with colleagues from CETPA and CCSESA (California County Superintendents Educational Services Association) in mentoring me in this transition. I am still learning the totality of the scope only being here just over a year. We provide a financial system that is developed in-house that serves a majority of our districts and also provides internet services to the CENIC network in partnership with K12HSN. There is also a consortium that leverages a student information system serving some of our districts. In all the services we provide we have in-house trainers to continually provide professional development to districts and in the use of our systems.

We also want to be a resource to our districts in helping them achieve their goals by creating relationships and understanding their needs in a very diverse region. As we understand their needs, we can make adjustments and help the best way we can.

We also have numerous programs where we provide support in technology for early childhood, career technical, charters, court, adult and special education. Our county, like many other county offices, serves a very diverse population and diversity in programs.

**HOW LONG HAVE YOU BEEN IN THE COMPUTER INDUSTRY?**

I have been in the technology industry since 2003 and since 2005, for technology in the arena of education.

**WHAT DREW YOU TO THE INDUSTRY AND WHAT DO YOU LIKE MOST ABOUT IT?**

“Creativity is intelligence having fun.” – Albert Einstein

I believe that technology has allowed us to be creative and, in this industry, we allow our students to showcase their creativity. It is fun to be in an industry where technology allows for more innovation and to see it happen in the classroom. It is amazing to see young minds do amazing things as their creativity knows no bounds. It is a great industry where children challenge the norms and use technology to further the community, solving problems, creating new questions, and transforming our world instantly. It is great to be part of a group and community that inspires the next generation to be more.

**WHEN DID YOU JOIN CETPA AND WHY?**

“There is immense power when a group of people with similar interests gets together to work toward the same goals.” – Idowu Koyenikan

I was first introduced to CETPA by a gentleman named Stephen Carr in 2006. He was and still is very influential to me professionally. The “why” was that there is just an exciting atmosphere working with like-minded colleagues and sharing experiences to better yourself, the people around you, and education.
municator, and a technologically savvy person who can work with all district staff at all levels in the district (CoSN CTO Council, 2004).

As you reflect on this past year, I recommend spending time considering the following:

- the things that went well
- the things that could have gone better
- the goals you’ve set and the metrics by which you determine success
- the relationships with employees that you supervise; peers and colleagues you collaborate with
- your physical and mental health
- The last time you stopped and took a deep breath or detached from work for more than 12 hours

My personal reflections have been guided through the reading of Edward Schein’s “Humble Inquiry: The Gentle Art of Asking Instead of Telling.” Schein defines humble inquiry as “the skill and art of drawing someone out, of asking questions to which you do not already know the answer, of building a relationship based on curiosity and interest in the other person” (p.21).

Contained within these 125 pages are many reflective prompts that have steered my thinking. He submits a few ways we might support ourselves in the journey of learning to be more humble and inquisitive:

- Slow down and vary the pace (p. 101);
- Reflect more and ask yourself humble inquiry questions (p. 102);
- Become more mindful (p.103);
- Try innovating and engage the artist within you (p.103);
- Review and reflect on your own behavior after an event (p.106);
- As a leader, build relationships with your team members (p.107).

I hope you enjoy your summer. Here’s to another great year ahead with more opportunities to reflect and to grow.

REFERENCES


In J. Salpeter (Ed.), CoSN compendium (pp. 1-8). Washington, DC: Consortium or School Networking.


Get free Science gear from Google: goo.gl/dMhwP4

This guide will also provide great ideas with varying levels of investment needed: 2015 EdSurge Guide to build your makerspace: http://bit.ly/1KrTzHy

Research in this area is in progress and the educational arm of Makerfaire will be the organization to watch: http://makered.org/resources/

Harvard Education Publishing Group did conduct a study of makerspaces. Learning in the Making: A Comparative Case Study of Three Makerspaces and others are searchable, but I recommend you wait for MakerEd’s research which will be comprehensive.

Shifting culture is no easy business, but due to the very hands-on nature of the maker movement, I will say it is totally possible in short order if you are clear on the systemic vision and goals you hope to achieve. I don’t want to see makerspaces at every school. I want to see maker-based education occurring often in every applicable classroom. If you live in California, do you want to get MakerEDU certified? Check out the Sonoma State Maker Certificate Program and their resources for more information. https://web.sonoma.edu/exed/maker-certificate/
CETPA CHATS WITH MEMBER  
continued from 27

you, and the students you serve. I did not know the true value of CETPA for another couple of months as I was a new Director of Technology at the time and realized that CETPA had an amazing amount of resources available. I was part of the Ventura Gold Coast Technology Group (VGCTG) where I got to know a lot of the regions’ technology leaders and learned a lot from them in what they were facing in all avenues. There is so much richness in the conversations and the relationships that are made, and although I have moved around in different regions, I am still connected to many of the technology leaders in the different areas.

WHAT IS YOUR ROLE AS A DIRECTOR AT LARGE FOR CETPA?

As a new Director, I feel that my role is still filling out and morphing. CETPA is an amazing organization and has a lot of influence throughout the state that can be leveraged to serve our students. There are a lot of things that CETPA has already done and is currently working on that really helps our districts. As a Director at Large, I want to listen to the needs of our community and champion items that will better serve them.

WHERE DOES CETPA NEED TO GROW?

Watching CETPA grow over the past decade has been really nice in creating community between educational leaders, championing privacy policies for students, creating agreements with vendors, and the list goes on. The need to grow is in every organization but it is rare to find an organization where it is part of their core. CETPA has always been evolving and growing. This is a byproduct of the growing community bringing ideas challenging the norms and growing its sphere of influence. I am proud to be part of that growth because it is the community that grows CETPA.

WHAT DO YOU LIKE TO DO IN YOUR LIMITED SPARE TIME?

My spare time in the past was usually taken by working on cars or mountain biking. However, it has changed quite a bit as I now have two young kids. I really enjoy spending time with them and my wife. On off nights, I play video games with a few friends where we do not do well. It seems my twitch reflex has diminished over time compared to players now in games like Fortnite.

TAKING A BYTE OUT OF PROFESSIONAL DEVELOPMENT  
continued from 17

garner support. The group had less than two months to make the new event a reality. With the help of faculty and district leadership, the event committee got to work.

Historically, annual professional development events consisted of organizing faculty and staff into grade-level and job-specific categories at various sites, with the intent of receiving training from contracted (often expensive) outside trainers (county offices of education or vendors). While this approach may work in certain and unique circumstances, the goal of the event committee was the polar opposite of that approach. The committee’s goal was to transform the annual professional day into a one-day conference developed specifically for the needs of faculty and staff. Using the results from the technology and learning surveys, the committee created a list of general topic session titles, such as “Getting Started with Google Tools” and “Introduction into Google Docs,” etc. Classified and certified staff received the list of general topic sessions. Staff was asked to vote on the top 15 sessions of their choice via a Google Form. The results were used to create specific session titles aligned with the district’s strategic goals, e.g. ‘Close Reading with Google Tools’ and ‘Formative and Summative Assessments using Google Forms,’ etc. Faculty and staff with experience on a particular subject or topic were then invited to present a majority of the sessions. Session presenters participated in an entire day of planning to create presentations and activities for the annual professional event. The committee felt that a program designed by ECESD staff for ECESD staff would build confidence with presenters and make the sessions much more applicable.

The event was extremely well-organized. Before event day, classroom preparations took place. This included older projectors and projector screens upgraded with new equipment, such as electronic power bars for laptop charging distributed to classrooms, school sitemaps printed for attendees, and presenters invited beforehand to become acquainted with their assigned class. Maintenance staff were armed to ensure facility preparation for the influx of adults on campus. District staff registered and received a customized event schedule using Google Forms and Add-ons. On event day, attendees enjoyed a continental breakfast and opening remarks from the Superintendent. Event attendees spent the day in three distinct sessions (1.5 hours each) separated by passing breaks and lunch. The event was a major success! Every attendee contributed to the final list of session topics and was able to select the sessions most applicable to them. The post-event survey results were extremely positive. Every attendee rated the event as successful and rated most sessions as “good” or higher. During the post-event debrief, district leadership and presenters discussed wins and noted areas of improvement for future events. The entire event team was tremendously proud of what the team had accomplished in such a short amount of time. The Annual Professional Development Day at El Centro Elementary School District was, indeed, transformed.

The Annual ECESD Conference, as it’s known today, is one of three annual signature events. Data from the BrightBytes Technology and Learning system is still used today to create session titles, and ECESD staff continue to develop and lead sessions. The committee improves aspects of the conference year after year, e.g. categorizing and leveling sessions and starting the event with a keynote. While hosting such an event can be daunting, the benefits (increase in Google certified staff, less hesitation to adopt, and improved access for students) far outweigh the work involved in hosting the annual conference. The most recent District CASE score is up 50 points! Two of the four category scores are advanced, and one is exemplary. The diligence, cooperation and perseverance of the entire ECESD team is proving successful and beneficial to teaching and learning.

ANTONIO ROMAYOR JR. IS THE CHIEF TECHNOLOGY OFFICER (CTO) FOR EL CENTRO ELEMENTARY SCHOOL DISTRICT LOCATED IN IMPERIAL VALLEY. HE IS A GRADUATE OF THE 11TH CETPA CTO MENTOR PROGRAM, FAMILY MAN AND EXTROVERT! HE CAN BE REACHED AT AROMAYOR@ECESD.ORG. #WEEDOTO11
Sacramento KCRA anchor and journalist Edie Lambert. Keep an eye out for Steve at lunch and other times. We hear he likes to randomly mingle and observe.

#CETPAGREEN

We’ve always taken measures to improve our sustainability, such as moving from a printed program to a mobile app. This year we’re going a step further: your conference bag will no longer have printed flyers or other paper marketing materials. Instead, we’re adding a digital bag to the app, where you can download materials on your own time.

LONGER EXHIBIT HALL RECEPTION

We're responding to requests from both vendors and attendees to add an hour to the Wednesday evening exhibit show reception. Now you'll get three hours to have conversations with those providing the latest developments in classroom technology.

NEW NAME FOR VENDOR SHOWDOWNS

One tradition we're tweaking is the name for our popular vendor vs. vendor presentation contests. With the rise in visible incidents of school violence in the media, our Board of Directors could no longer support promoting the traditional “shootout” name. Now we’re going with “showdowns”—think Price is Right and Come on Down! to vote on topics such as Help Desk Ticket Systems, Wireless Projection/Mirroring, and more.

CETPA 101

Is this your first time at a CETPA conference? Or, are you wondering what else we do besides the conference? Join us for an opening session with board members, staff, and other veterans to get the inside track on what makes us unique. We’ll be talking about how to maximize your time at the conference, as well as highlighting our regional groups, the CTO Mentor Program, our student data privacy work, and discount software licensing programs.

COME JOIN US!
REGISTER NOW FOR EARLY BIRD PRICING!
Insurance for School Issued Devices: iPads, Chromebooks & Laptops

No Cost To Schools!

School Device Coverage gives your district’s parents a simple and affordable insurance solution, protecting them against the high costs typically incurred when repairing or replacing an educational technology device. Our programs include:

- Rapid, local repairs
- Unlimited claims and full transferability
- Protection against loss, damage, and theft
- Fast, easy online claims process
- Specialized pricing to meet the needs of each individual school or district

Types of Coverage

- Accidental Damage
- Cracked Screen
- Liquid Submersion
- Fire
- Loss
- Theft

Quick and Easy Claims

Loss/Theft/Damage reported to School Faculty
Claim filed quickly and easily online at www.SchoolDeviceCoverage.com
Parent takes device to the pre-approved repair facility for quick turnaround

Call 1.888.978.3515 with questions OR email: Michele@schooldevicecoverage.com
www.SchoolDeviceCoverage.com
(Monday – Friday 7am – 5pm Pacific Time)
Spanish speaking support available.

License #0E61972. iPad is a registered trademark of Apple, Inc. School Device Coverage is a trademark of U-PIC Insurance Services, Inc.

Infinity already serves 15% 17% 18% 20% 25%+ of all California school districts.

E-Rate Services
- E-rate C1 & C2 Filing & Reporting Services
- Funding, Tracking & Monitoring
- Up-to-date E-rate Compliance & Regulations
- Fund Recovery
- E-rate Review & Audit Representation

Design Services
- Complete Systems Design & Specifications
- Drafting Services
- Budget Estimating
- Managing the Bidding Process
- Procurement Compliance

Project Administration
- Dedicated Assigned Project Manager
- Project Timeline Development
- Vendor Management
- Cost Control
- Inspection

We would love to put our extensive experience to work for you, too.

Infinity Communications and Consulting, Inc.
Be sure to stop by our booth #401 at CETPA 2018 to get your Infinity coffee mug and more!!

☎ 1.661.716.1840  ☎ 1.661.716.1840  ☎ www.Infinitycomm.com  ☎ Info@Infinitycomm.com
CEDR Systems is a software development department of the San Joaquin County Office of Education and the developers of EDJOIN, SEIS, PROMIS, Beyond SST, California School Dashboard, SARC Online, PFT Data, California Career Resource Network, AB 430, and California Community College Registry among others. Our systems and services have expanded nation-wide and we serve over 5,000 school districts across the nation and provide support to over 120,000 educators.

EDJOIN
Educational Job Recruitment, Screening, Tracking & Hiring System
www.edjoin.org

BEYOND SST
Streamlining & Facilitating the SST, 504 & Referral Process
www.beyondsst.org

SEIS
Centralized Online Management of IEPs & Special Education Records
www.seis.org

PROMIS
Student Information System built for County Operated Schools & Programs
www.mypromis.org

SAN JOAQUIN COUNTY OFFICE OF EDUCATION
James A. Mousalimas, County Superintendent of Schools

FOLLOW US @CEDRSYSTEMS ON