FCMAT
FISCAL CRISIS & MANAGEMENT ASSISTANCE TEAM
CSIS California School Information Services

Montecito Union School District

Technology Review

August 15, 2012

Joel D. Montero
Chief Executive Officer

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Tammy Murphy, Superintendent
Montecito Union School District
385 San Ysidro Road
Santa Barbara, CA 93108

Dear Superintendent Murphy:

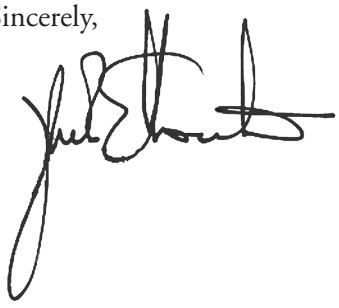
In February 2012, the Montecito Union School District and the Fiscal Crisis and Management Assistance Team (FCMAT) entered into an amended agreement to provide a review of the district's technology programs and services. Specifically, the agreement states that FCMAT will perform the following:

1. Review the staffing for technology service delivery and make recommendations for improvement.
2. Review the delivery of instructional technology support services and make recommendations for improvement.
3. Review the delivery of administrative technology support services and make recommendations for improvement.
4. Review the organizational structure for technology services delivery and make recommendations for improvement.

This report contains the study team's findings and recommendations.

FCMAT appreciates the opportunity to serve you and extends its gratitude to all the staff of the Montecito Union School District for their cooperation and assistance during fieldwork.

Sincerely,



Joel D. Montero
Chief Executive Officer

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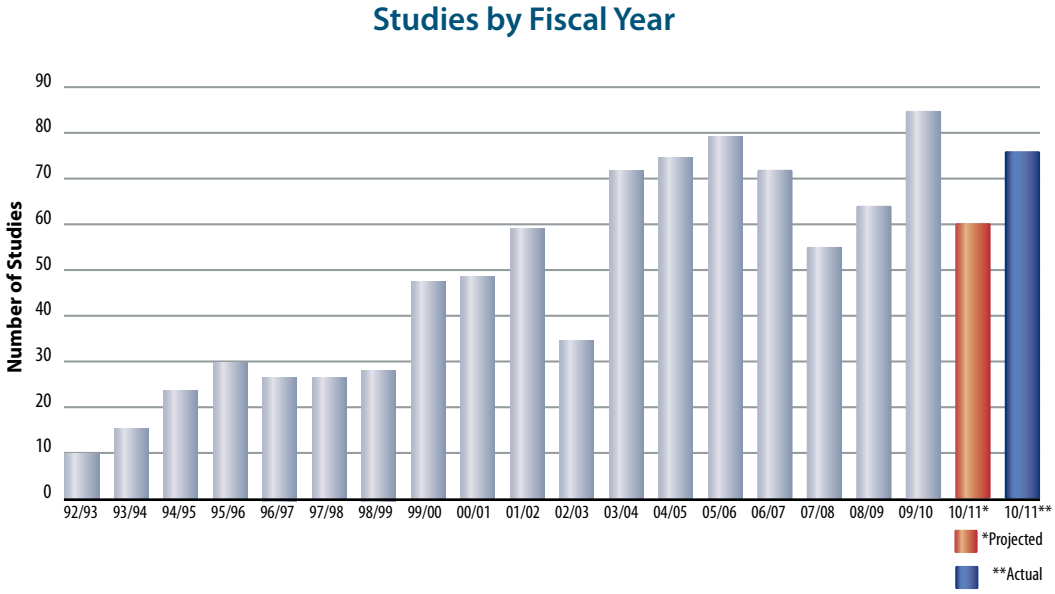
About FCMAT

FCMAT's primary mission is to assist California's local K-14 educational agencies to identify, prevent, and resolve financial and data management challenges. FCMAT provides fiscal and data management assistance, professional development training, product development and other related school business and data services. FCMAT's fiscal and management assistance services are used not just to help avert fiscal crisis, but to promote sound financial practices and efficient operations. FCMAT's data management services are used to help local educational agencies (LEAs) meet state reporting responsibilities, improve data quality, and share information.

FCMAT may be requested to provide fiscal crisis or management assistance by a school district, charter school, community college, county office of education, the state Superintendent of Public Instruction, or the Legislature.

When a request or assignment is received, FCMAT assembles a study team that works closely with the local education agency to define the scope of work, conduct on-site fieldwork and provide a written report with findings and recommendations to help resolve issues, overcome challenges and plan for the future.



FCMAT also develops and provides numerous publications, software tools, workshops and professional development opportunities to help local educational agencies operate more effectively and fulfill their fiscal oversight and data management responsibilities. The California School Information Services (CSIS) arm of FCMAT assists the California Department of Education with the implementation of the California Longitudinal Pupil Achievement Data System (CALPADS) and also maintains DataGate, the FCMAT/CSIS software LEAs use for CSIS services. FCMAT was created by Assembly Bill 1200 in 1992 to assist LEAs to meet and sustain their financial obligations. Assembly Bill 107 in 1997 charged FCMAT with responsibility for CSIS and its statewide data management work. Assembly Bill 1115 in 1999 codified CSIS' mission.

AB 1200 is also a statewide plan for county office of education and school districts to work together locally to improve fiscal procedures and accountability standards. Assembly Bill 2756 (2004) provides specific responsibilities to FCMAT with regard to districts that have received emergency state loans.

In January 2006, SB 430 (charter schools) and AB 1366 (community colleges) became law and expanded FCMAT's services to those types of LEAs.

Since 1992, FCMAT has been engaged to perform nearly 850 reviews for LEAs, including school districts, county offices of education, charter schools and community colleges. The Kern County Superintendent of Schools is the administrative agent for FCMAT. The team is led by Joel D. Montero, Chief Executive Officer, with funding derived through appropriations in the state budget and a modest fee schedule for charges to requesting agencies.

Introduction

Background

Located in the unincorporated community of Montecito in Santa Barbara County, the Montecito Union School District serves 466 K-6 students in 27 classrooms with an average class size of 17. The district employs 101 certificated and classified staff members and reported an annual budget of $10.5 million in 2010-11.

The district's Academic Performance Index (API) test scores consistently rank in the top 10% of the state. The district receives support from numerous volunteers for classroom support. The Montecito Educational Foundation (MEF) and Parent Teacher Association (PTA) parent groups provide funding and countless volunteer hours.

The district documents its support of technology for staff and students through its strategic plan third initiative, Technology in a 21st Century School as follows:

> Montecito Union School will prepare students and staff for the challenges of the 21st century by providing them with opportunities to develop technological literacy in a constantly evolving technological environment. Students and staff will develop the skills to use cutting edge tools in a safe, responsible and efficacious manner. Technology will enhance and support, educational experiences.

Study Guidelines

In December 2011, the Montecito Union School District requested that FCMAT conduct a review of the district's delivery of technology. The study agreement specifies that FCMAT will perform the following.

1. Review the staffing for technology service delivery and make recommendations for improvement.
2. Review the delivery of instructional technology support services and make recommendations for improvement.
3. Review the delivery of administrative technology support services and make recommendations for improvement.
4. Review the organizational structure for technology services delivery and make recommendations for improvement.

A FCMAT study team visited the district and conducted interviews with the staff on April 5, 2012. During this visit, study team members also toured the district/school site.

During FCMAT's visit, the study team collected and reviewed documents needed to assess the district's staffing and organizational structure and the roles and responsibilities of its technology staff. Documents reviewed and discussed in interviews included the district's technology plan, system information, operational policy and procedures application, and board policies and administrative regulations.

Study Team

The study team was composed of the following members:

Andrea Alvarado
FCMAT Management Analyst
Bakersfield, CA

Marisa Ploog, CPA
FCMAT Fiscal Intervention Specialist
Bakersfield, CA

Leonel Martínez
FCMAT Technical Writer
Bakersfield, CA

Susan E. Holliday, Ed.D.*
Executive Director,
Technology and Information Services
Capistrano Unified School District
San Juan Capistrano, CA

Philip Scrivano*
Chief Instructional Technology Officer
Las Virgenes Unified School District
Calabasas, CA

*As members of this study team, these consultants were not representing their respective employers but were working solely as independent contractors for FCMAT.

Executive Summary

The Montecito Union School District has the financial resources to operate a technology-rich educational program. As described in the district's 2011 strategic plan, a successful technology program requires a supportive planning team and knowledgeable staff to support professional development and equipment. It also requires a reliable infrastructure to connect classroom equipment to other necessary resources, supportive policies, procedures and systems to meet student academic requirements

The district's technology committee does not meet regularly. Instructional staff members feel disenfranchised in the district's technology and do not share a common understanding of how to apply instructional technology to achieve strategic goals. The role of a technology committee made up of administrative, technical and instructional staff is integral to developing a unified plan that represents those affected and aligns with the district's goals and objectives for educational technology.

The implementations of the Study Island, SchoolCity applications and a pilot iPad project have demonstrated deficiencies in implementation planning and response. Study Island is a subscription Web-based program that allows students to logon and complete practice activities for enhancing understanding of specific skills. The goals for the use of Study Island are unclear, and it is not used consistently between classrooms. SchoolCity is a student assessment system that allows district staff to review standardized test scores, create custom benchmark assessment tests, and evaluate student performance. The equipment necessary to utilize SchoolCity does not function on the district's Apple operating system. In addition, the district's iPad pilot project demonstrates the need to provide integration guidance for the use of these devices, a procedure to purchase applications, and technical support to overcome any problems.

The district has many different adopted systems and programs; however, some are not fully utilized. For example, staff members do not use the grade book and report card modules in the student information system, PowerSchool. In addition, PowerSchool is not the primary source for student contact information for all staff members. Ideally, the student information system is the master source of student data and records, and a fully utilized system can provide easy online access to parents to improve awareness of their child's performance. Other systems and programs do not function properly or provide duplicative functionality. For example, the district has experienced lost emails with the FirstClass email system, but instead of researching and correcting these problems, staff members use other software, such as Schoolwires, Blackboard Connect and Google Gmail.

The district lacks inventory lists, network diagrams, equipment replacement plan and an electronic document retention policy. Policies, documentation and procedures play a vital role in guiding operations, sharing knowledge and communicating goals.

The district's infrastructure is out of date and not an enterprise standard. Equipment is replaced when it fails, generally disrupting classroom technology. Core equipment and wireless access points are not configured correctly, causing serious network disruptions. Operating systems on servers cannot be updated because of hardware limitations, causing the district to adopt workarounds instead of fixing the original problems. The district lacks monitoring tools or directory services. These problems combined provide a poor foundation for expanding the use of technology in the classroom. The instructional staff is interested in obtaining additional technology products for the classroom. However, a poorly functioning network may cause the staff to discontinue using these products if technical issues take away too much class time.

Some positions in the Education Technology Department are assigned instructional duties that take time away from supporting technology. The staff focuses on developing classroom labs instead of learning and utilizing the technical skills necessary to support and maintain infrastructure and devices. A certificated teacher can more effectively manage student instruction and classroom integration. The staff does not have communication software to assign, monitor, and escalate support requests. The department's dated organizational structure also does not support technology's integral role in business and instruction. The design, function and knowledge base of the Education Technology Department is not sufficient to support existing or expanding technology.

Findings and Recommendations

Planning and Guiding Technology

At the Montecito Union School District, the technology committee is led by the dean of students and consists of department representation and teachers from each grade level. Although the committee actively met in prior years to discuss technology goals and objectives, purchasing and training, it has not met regularly. Because of the resulting lack of committee communication and collaboration, technology initiatives lack unified support. Although the strategic plan defines the vision and goals of instructional technology, the district does not consistently apply the plan. A functioning committee will help the district strategically adopt educational technology initiatives, unify support, and align training.

The district's technology plan is valid through June 30, 2013 but consideration of the next plan has not begun. School districts should submit and receive approval for new technology plans from the California Department of Education (CDE) before expiration of the previous plan to maintain E-Rate program funding eligibility.

Technology committee input into developing the technology plan is important for an effective document that represents all those affected and aligns with the district's goals and objectives for educational technology. A technology committee should help develop meaningful curricular, professional development and evaluation goals and objectives to support the integration of educational technology for improved teaching and learning.

School districts that receive funds under the No Child Left Behind (NCLB) Act of 2001 must approve a local educational agency plan (LEAP). A LEAP describes the actions a school district will take to ensure it meets programmatic requirements, such as student academic services designed to increase student achievement and performance. The district LEAP identifies professional development and integration action steps to support teacher use of technology in achieving curricular goals. However, the technology plan does not reflect these action steps.

Recommendations

The district should:

1. Reconvene the technology committee to identify, select and approve major instructional software applications and equipment in alignment with district goals, curricular needs and technical minimums.
2. Work with the technology committee now to start developing the new technology plan effective July 1, 2013.
3. Update the technology plan with current LEAP and strategic plan curricular goals and align staff development to support delivering these goals.

Technology in the Classroom

The district is piloting iPad devices in one first grade class. The fully implemented program will expand the use of iPad devices for student use in kindergarten through the second grade. A request was submitted to purchase additional equipment and fully implement the project prior to the district debriefing the staff member involved with the pilot. The iPad pilot project demonstrated a need for corrective measures and additional planning before full implementation. The pilot classroom has experienced problems with printing and projecting iPad content. Instructional staff members are unable to track student progress throughout the year because there are fewer devices than students in the pilot classroom, requiring students to share devices. The district has not developed a process to purchase iPad applications. Many school districts view iPad applications as a consumable item, like workbooks, because the purchase cost is low and updated products are constantly becoming available. Programs such as Apple's Volume Purchase Program (VPP) allow districts to support teachers' ability to purchase current, effective applications.

The district distributed iPad devices to instructional staff at the beginning of the school year with instructions for staff to become familiar with the devices, and indicated that further direction would follow at a later date. As of the date of FCMAT's fieldwork, additional guidance had not been provided and use of the devices varied among staff members. Some staff members check district e-mail or take attendance on the devices, while others are not aware that these functions are available. Although it is acceptable to disperse new equipment and technology for a short period for staff to gain familiarity before they receive intensive training, specific guidance and expectations should be provided for long-term use.

The district recently implemented a variety of instructional equipment and software, including the Web-based version of Study Island, an instructional and diagnostic program. These projects have been implemented in isolation, lacking direction and long-term planning. It has been difficult for leadership to determine how consistently the new products are utilized to enhance curricular goals and whether the use aligns with the adopted curriculum and standards. For example, Study Island allows students to log on and complete practice activities for enhancing understanding of specific skills from the school or home. Some instructional staff members use Study Island for homework assignments and minor test preparation in the classroom, and others do not use the software directly, but make it available for parents to utilize with their children at home. Study Island has not been implemented consistently or with a defined purpose and role in the adopted curriculum. Successful technology implementation strategies include goals and objectives and evaluate results to determine the value of the product.

Instructional staff members receive little technology professional development for new or existing technology products, including guidance to maximize student learning. Staff members share technology tips before and after weekly meetings on other instructional topics. In the past, the dean of students and other technology staff members provided the instructional staff with technology integration guidance. Trainings were well received, but lacked a connection to district goals and vision. The county office offers workshops and electronic learning resources for technology integration, but these opportunities are rarely attended and do not always align to the district's or teachers' needs. Effective professional development reduces the need for technology support, improves the adoption and integration of purchases and ensures that staff members use technology with consistency. Implementing a pilot program before full implementation builds the skills of staff members, enabling them to provide local support. Systematically planning and

implementing ongoing professional development for new software or hardware deployment is a best practice.

The district has had several delayed or problematic implementations as described in this report. Regular meetings between a curricular services division and a technology department can provide better perspective for implementation projects. Compatibility, professional development and resource availability are common discussion topics.

Recommendations

The district should:

1. Evaluate the iPad pilot experience with participating staff and determine whether additional resources are necessary. The district should also develop curriculum integration guidelines and general procedures and resolve technical issues that would prevent a successful implementation.
2. Meet with an Apple representative for guidance and resources on program development, professional development and other successful iPad program references, like Escondido Unified School District's iRead program.
3. Contact other districts with similar iPad programs to develop additional resources and functioning procedures.
4. Develop expectations and provide guidance and professional development to instructional staff members for the use of iPad devices in their job functions.
5. Work with the technology committee to consider the VPP purchase program and develop an iPad application purchase procedure.
6. Develop a technology implementation plan that includes strategies to communicate goals and objectives, provide start-up and ongoing professional development and evaluate results.
7. Assign the technology committee to assess Study Island and determine if district use of the program should be continued or discontinued. If continued, the district should develop and apply an implementation plan to communicate the purpose and expand use of the software.
8. Schedule regular meetings between the technology department and curricular department to evaluate projects from both perspectives and plan resource allocation.

Broadcast System

The district's telephone system distributes school broadcasts; however, there are no speakers to relay alerts outside of buildings. While no specific violations have been identified, if the school had an emergency during recess or physical education, students and staff members on the grounds would not hear the announcement or safety instructions.

Recommendation

The district should:

1. Evaluate the phone system and determine whether it can be modified by adjusting settings and/or purchasing additional equipment, to meet modern security needs. The district should modify the current system if feasible. If not, the district should research and purchase a phone and broadcast system to meet modern security needs.

Information Systems and Applications

Student Information System – PowerSchool

The district uses the PowerSchool student information system (SIS) for attendance and contact information. However, contact information is not entered consistently, causing it be outdated and requiring the staff to use other sources. The effort to maintain several sources is inefficient. Teachers indicated that they would depend more on the system if the contact information were up to date.

Teachers do not utilize the grade book feature in the SIS, instead using a variety of systems including Excel, Word, Easy Grade Pro or a handwritten grade book. Teachers indicated that the grade book component does not align appropriately to the grading practice. In addition, teachers do not use the system's report card feature, instead preferring Word or Excel. Standardized software decreases support demands and ensures compatibility with equipment and other software. Integrating the report card and grade book systems streamlines grade reporting by minimizing duplicate information entry. In addition, standardizing on the report card and grade book features in a SIS can provide easy online access for students and parents without duplicated entry. Best practice is for the SIS to function as the master source of student data and records. A fully utilized SIS with easy online access for parents improves parent awareness of their child's performance.

Recommendations

The district should:

1. Designate the SIS as primary source for student information, create goals, procedures and practices, and provide training for consistent usage.
2. Assign the technology committee to evaluate options for a standardized, integrated grade book and report card system, ideally integrated with the SIS.
3. Assign the technology committee to review PowerSchool's capabilities and determine whether it sufficiently meets district needs. If so, the district should develop a plan to expand the capacity and integration of PowerSchool, and if not, the technology committee should review and recommend an alternative SIS for adoption. The district should also provide staff development and training for certificated and technology staff.

Student Assessment System – SchoolCity

The district recently acquired SchoolCity, a Web-based software system for delivering and collecting common formative and summative student assessments. The project is still early in its classroom integration phase, and the administration is closely supporting the software. The administration uses the system to track, monitor and review groups for state testing scores. The most significant barrier to teacher adoption and regular use of SchoolCity for delivering assessments is the malfunction of the scanners, a major component of the system. The scanning software associated with SchoolCity is native to the Windows computer operating system. To run

the scanning client and scan benchmark assessment bubble sheets, teachers must run Parallels, Windows emulation software, on an Apple computer. The software causes errors when running in Parallels, preventing results from uploading to SchoolCity to be used in analysis.

Recommendation

The district should:

1. Examine the technical requirements of SchoolCity and implement a remedy for the technical issues. Suggested remedies include the following:
    a. Provide shared Windows workstations for scanning purposes,
    b. Work with the technology committee to select an alternative system that will work in the native Apple environment.

Website Development Application – Schoolwires

The district uses Schoolwires, a Web-based content management system, to develop district and classroom websites. The system includes a module to send an email to website users. A technology department classified staff member receives a stipend to act as webmaster and maintain district Web pages outside the regular 40-hour workweek. Since only the webmaster has been fully trained to use Schoolwires, and the work is expected to occur outside the normal 40-hour workweek, updates to the district website lag, and information is not always current. Teachers are responsible for developing and maintaining individual classroom Web pages. The district provided initial assistance to create the pages, and the webmaster assists in updates only if the teacher requests it. Because the district has no clearly defined guidelines for classroom Web pages, many are not maintained or contain inconsistent information. A website can be an effective way to share information with staff members, parents, the community and others; however, sites that have little change or contain outdated information are less useful because they are not visited regularly. The most effective websites are regularly updated with revised or new information. In addition, the most effective classroom Web pages contain a minimum level of information portrayed in a standard format for parents to become accustomed to as their child progresses through school.

Recommendations

The district should:

1. Cross-train the cabinet administrative staff to update district content on the website through Schoolwires to support the need for urgent updates and other changes when the webmaster is unavailable.
2. Provide the instructional staff with additional Schoolwires professional development.
3. Develop and communicate guidelines for minimum classroom Web page content and the frequency of updates.

Email System – FirstClass and ExchangeDefender

FirstClass, the district's email system, operates on a Mac Pro server, and Apple no longer provides operating system updates for the server, which is required to install newer versions of FirstClass. Cloud-based or hosted options, such as Microsoft Office 365, Google Apps or Zimbra, can create savings through reduced support and hardware maintenance costs. The district's First Class email system is out of date and does not provide enterprise business class features such as calendaring and task management. Staff productivity is limited because of the difficulty in accessing email through remote access, smartphones and iPads. To supplement the FirstClass email system, the district uses ExchangeDefender for spam filtering. A common complaint is that important emails are not reliably transmitted or received. Some instances are resolvable by retrieving the email from ExchangeDefender, but technology staff members have been unable to retrieve other lost emails. To work around the issue of poor reliability, staff members use several alternative email products, such as Google Mail, Blackboard Connect and Schoolwires. The Family Educational Rights and Privacy Act (FERPA) is federal law that protects student education records.

Title 5 of the California Code of Regulations (CCR) defines minimum retention periods for public records that the law requires to be retained or that are necessary or convenient for retention. For example, the Family Educational Rights and Privacy Act (FERPA) protects student education records, and Title 5 requires some of these to be retained permanently. Disposable records must be retained until the third fiscal year after their creation. The Public Records Act (Government Code section 6252) defines records broadly enough to include email. The Federal Rules of Civil Procedure and California statutes make it clear that, in the event of litigation, the fact that records have been disposed of in accordance with a regularly followed procedure does not violate the law.

The staff's use of alternative email programs hinders the district's ability to abide by these provisions.

Recommendations

The district should:

1. Research FirstClass to determine whether investing in updated equipment and updated software will resolve concerns and problems.
2. Work with the technology committee to develop criteria to evaluate current and potential email systems.
3. Examine alternative enterprise options for email communication, such as Microsoft 365, GoogleApps or Zimbra.
4. Develop a transition plan that includes data to transfer to an updated FirstClass or alternative email system.

Mass Notification Systems

The district uses several systems for mass notification of parents. For emergency phone call notification, the administration uses Blackboard Connect, a mass communication system that can utilize the phone, text messages, email, and social networking sites to distribute information to parents and other people affected. In addition, instructional staff members use Schoolwires or the FirstClass email system to send class emails to parents, and staff members personally place

attendance calls to notify parents of their child's absence. The systems are not integrated and require separate contact list maintenance. Other districts use a mass notification system to send weekly announcements to parents, reminders regarding upcoming assessments or activities, and automate attendance calls for absence notification. When properly implemented and operated, mass notification systems can increase parent involvement, enhance student achievement, and improve staff efficiencies.

Recommendations

The district should:

1. Assess communication activities and develop criteria to evaluate and select a district mass notification system.
2. Request the BlackBoard Connect representative provide an overview of the system's capabilities. If the district decides to continue with the system, it should obtain additional training to use it more effectively.
3. Develop standards, procedures, and practices and provide the staff with professional development in using the adopted mass notification system.

Other Administrative Applications

The process for requesting vacation and reporting staff absences is manual and inefficient, creating the opportunity for error. The Green Team, a team of staff, students and community members, mission statement demonstrates the district's commitment to being environmentally responsible, and online absence management systems such as SubFinder and AESOP create administrative labor and paperwork maintenance savings while conserving paper.

The after school care and enrichment program uses an Excel spreadsheet for registration and tracking. Tracking registrations, payments, cancellations and refunds is time-consuming, and the overall manual process is cumbersome. Online registration management systems, such as ASAP or Active Network, can help streamline program administration by accepting online payments, maintaining class lists and providing useful reports.

The district lacks a uniform or formal method to track technology assistance requests. Staff members make requests by phone, email or in person, but the informal process does not provide administration with the information needed to manage technology. Two technical support positions respond to requests for assistance. Differing work schedules and duties preclude the technology staff from communicating about outstanding problems, and there is no documentation of how or when a problem is resolved. Requests submitted through a help desk ticketing application, such as MyTechDesk or Kaseya, automatically create a log of requests and responses. The district can use this information to determine professional development, equipment and technical staffing needs. In addition, a help desk ticketing system is effective in assigning assistance requests.

To accommodate additional devices and technical support demands, a process for requesting and tracking requests should be developed. The district should evaluate and adopt a help desk software application that will help manage the department, provide a history that can be analyzed to determine equipment and professional development needs, and help manage technicians' time.

Technicians manage laptops, classroom and lab computers manually and one at a time on location. A server used to provide remote updates has not been maintained. A remote management

system streamlines technical support and decreases the amount of labor required to maintain devices. Specifically, remote management software allows technicians to access and troubleshoot devices from a remote location, reducing travel time between support requests. Common remote management systems include Apple Remote Desktop (ARD), Casper, Kaseya and System Center Configuration Manager (SCCM).

Recommendations

The district should:

1. Evaluate and implement an absence management system.
2. Evaluate the labor required to administer the after school care and enrichment program and determine whether an online registration management system is a viable option to decrease operational costs.
3. Develop a uniform and formal process for requesting technical support.
4. Evaluate and implement a help desk ticketing application.
5. Evaluate and implement a remote management system.

Policies, Documentation and Procedures

Inventory and Network Documentation

The district does not maintain an inventory of software licenses, making it difficult to plan and budget for software renewals. A software license inventory increases licensing compliance and reduces legal risks. Technology staff and the technology committee can use inventory information to plan upgrades and evaluate software use.

The district's equipment inventory is not up to date and does not differentiate between computer/peripheral equipment and networking equipment. In addition, the district does not maintain network topology maps. The documentation needs vary between the two equipment categories. Both inventories track make, model, vendor, location, cost, purchase date and funding source, but the networking equipment inventory also tracks network configuration and estimated life span. The computer/peripheral equipment inventory additionally tracks details specific to computers and servers, such as the processor speed and the amount of memory and disk space installed.

Tracking networking equipment separately provides the district with complete information to plan for equipment replacement and minimize network down time. A topology map, or an illustrated network document, pictorially depicts the relationships and connections between the networking equipment. It is an effective way quickly evaluate, identify and correct network problems and can be used by the administration can to help make decisions.

Recommendations

The district should:

1. Conduct a survey of software and equipment
2. Develop and maintain inventories of software licensing, computer/peripheral equipment, and networking equipment.
3. Document the district network topography at physical and configuration levels.

Software and Hardware Standards

Each classroom is outfitted with a laptop, printer, iPad, document camera and choice of a television or SMART Board. A minimum classroom technology standard defines priorities for funding technology in the classroom, focusing resources on effective instructional programs, and addressing the inequitable distribution of core technology. A minimum standard can be used to define up-to-date computer and project equipment replacement needs. In addition, a minimum standard based on job functions ensures that staff members have the appropriate equipment and software to perform duties such as attendance, report cards, and delivery of standards based instruction.

The district uses the county office system for fiscal management and state-required software for reporting purposes. These systems perform most effectively on a Windows computer platform; however, the district business office staff has been assigned Apple computers for efficient technical support, which hinder productivity and performance because of platform incompatibilities, even when using Parallels. Staff members expressed frustration at the inefficiency of working with dual operating systems when all the work could be completed in Windows. Although platform standardization is effective for efficient technical support operations and adoption, platform flexibility is essential when system performance hinders the staff in performing duties.

Recommendations

The district should:

1. Present to the technology committee the classroom component of the software and equipment survey results recommended in the Inventory and Network Documentation section of this report. The technology committee should use this information to develop a minimum classroom equipment standard for adoption. The district should update the technology plan with the new standard.

2. Identify a PC standard computer and provide the staff, including business office staff, with Windows computers based on software requirements.

Technology Acquisition and Replacement

The district lacks standardized approval criteria for acquiring instructional software, hardware and peripherals. Evaluating requested software and hardware components ensures the product supports the technology plan and plays a functional role in the classroom. Evaluating technical and educational compatibility enhances the implementation success rate. In addition, the evaluation prompts discussion about who is responsible for installations, license requirements, and professional development. Posting a list of approved software and hardware in a convenient location can guide staff in researching and selecting preapproved tools without limiting flexibility. Developing and communicating a process to add software and hardware to an approved list provides flexibility in the classroom. Teachers seeking to utilize nonstandard software should have a clear understanding of the process for requesting approval. A sample equipment request form included in Appendix B.

The district lacks a plan for equipment replacement. Instead, equipment is replaced when it fails, causing unexpected network downtime. A five-year implementation plan documents technology replacement priorities, ensuring vital equipment remains within its functional lifespan, and provides guidance for technology budget development.

Recommendations

The district should:

1. Develop approval criteria and a process for approving instructional technology. Include discussion of professional development, license requirements, and system and support requirements.

2. Create a list of approved technology instructional tools. The district should post the list in a location convenient for all instructional staff members to access. The staff should be educated on the criteria and process to add technology to the approved list.

3. Develop a five-year equipment replacement plan. The district should replace critical networking equipment on an appropriate schedule to maintain functionality and network reliability.

Omitted Policies and Procedures

The district lacks a formal email and electronic document storage retention policy. Government Code section 6252 and Title 5 of the California Code of Regulations section 16025 define minimum public record and document retention requirements. The safe harbor provision in FRCP rule 37(f) would limit district obligation to produce electronic documents beyond a set retention period; however, failure to adopt and abide by a retention policy obligates the district to produce electronic documents perpetually. A sample board policy and a sample administrative regulation for electronic record retention are included in Appendix B.

The district does not have password or network security policies. A password security policy establishes minimum guidelines for password procedures. For example, it may specify that a password must include at least one uppercase letter, one number, one symbol and be at least eight characters long. Another component is the frequency that a user must change the password such as once every three months. A network security policy defines the level of access afforded to staff positions, limiting access to network resources. Both policies are important components to secure the district's network.

Recommendations

The district should:

1. Develop an email and document storage retention policy and submit it to the district governing board for formal approval. The district should seek a legal review on the strength, weaknesses, and liability of the policies.

2. Develop and adopt a password security policy and network security policy. Best practice is to seek district board approval and incorporate the policy into the district's administrative regulations.

Network Administration and Performance

The school network, which consists of all equipment required to obtain access to the Internet, local systems and applications, is unreliable and does not work well with the current technology.

The district was unable to provide network topology documentation. Instead, the following network infrastructure was observed during fieldwork and used for analysis.

The district receives a 10 megabits per second (Mbps) Internet connection from Cox Communications, the Internet service provider (ISP), a speed that is sufficient for current needs, but may prove insufficient as technology is used more in the classroom.

The Internet connection connects into a SonicWALL appliance, the primary piece of network equipment, which provides firewall, Web content filtering, and dynamic host control protocol (DHCP) server network functions. All network traffic, including application and Internet traffic, must pass through this piece of equipment, and if it is not functioning at almost 100% capacity, no other services will work well and service will be unreliable. A review of the SonicWALL configuration found that the firewall, router and DHCP functions are not configured for reliability and security. The utility and security concerns found in the configuration demonstrates a lack of networking knowledge and are likely the cause of the network problems mentioned during interviews.

The first concern is that the school district network is flat, meaning only one local area network (LAN) is configured. A LAN is a network that connects computers in a limited area such as in a building or at a site, and devices on a single LAN network share network resources such as bandwidth. Staff members and students on a flat network may experience poor network performance because devices are competing for network resources. The security of a flat network is poor because students and visitors connecting to the unsecure wireless network available on site have access to district administrative computers and data such as business and personnel records. In addition, a demilitarized zone (DMZ) was previously setup, but is no longer in use. A DMZ is a network used for servers that provide services inside and outside the network such as email and Web servers and provides security from external attacks. The current configuration provides no protection from internal or external attacks based on an analysis of the SonicWall. Up to five internal LANs can be configured on the SonicWALL appliance, including a DMZ.

The second concern is related to domain name services (DNS). Networked computers use Internet protocol (IP) addresses similarly to the way people use phone numbers in locating and connecting to each other; however, since these addresses are difficult to remember, a public DNS server acts like a phonebook, translating the domain name to an IP address. For example, when a parent enters http://www.montecitou.org into a browser, a public DNS server translates the domain to 209.114.152.210 IP address. Likewise, a network requires a private DNS server to differentiate between internal and external traffic. A network's private DNS server maintains a list of private IP addresses in the network and a list of recently visited public IP addresses outside the network. This increases speed for accessing internal and external resources on the network. In the SonicWALL configuration, three DNS server addresses are listed as private DNS servers. Two of the addresses are public DNS servers. This configuration may cause staff and students to be unable to connect to internal resources, such as servers and printers. As a standard, all public DNS server addresses should be on the ISP network, and all private DNS server addresses should be on the school district network.

The third concern found in the SonicWALL configuration was contained in the setup of the dynamic host control protocol (DHCP) service. A DHCP service automatically assigns network settings to a device, such as a computer or printer. Traditionally, a technician manually assigns network settings to individual devices. The use of a DHCP service has gained popularity with the increased popularity of laptops and other mobile devices that easily move on and off a network. Settings assigned by the DHCP service include an IP address and lease duration value, among other settings. As previously discussed, the IP address allows networked computers to connect to each other and must be unique on the network. Each network has a limited number of IP addresses that can be assigned. The lease duration value is the length of time an IP address is assigned to a device before it expires. Once the duration expires, the device requests the settings from the DHCP service again. If the lease duration is too long and new devices are frequently attached to the network, as in the case of public WiFi access, the network may run out of IP addresses to assign. In contrast, a short lease duration causes superfluous network traffic and limited network access for individual devices if the DHCP service is unavailable at the time the lease expires. The DHCP settings observed in the configuration demonstrate a lack of networking knowledge. The lease duration is set for two hours, a very short time for a school district or site environment. A lease duration of 12 hours would allow network administrators to monitor the frequency equipment attaches to and detaches from a network. In environments where network devices are relatively stable and there are sufficient IP addresses, such as limited or no public WiFi access, a lease duration of a year is an acceptable option.

The SonicWALL appliance connects to switches in the main distribution frame (MDF), the primary wiring closet, in the administration building. Devices in the administration building connect to the MDF switches via 10/100 Mbps ports. The MDF switches also connect secondary wiring closets, called intermediate distribution frames (IDFs), in outlaying buildings back to the MDF via 1gigabit per second (Gbps) fiber optic links. The current HP switch infrastructure does not meet the needs of the district network. The switches are more than five years old, unreliable, and slow by today's standards. A modern switch infrastructure can support 10/100/1000Mbps ports to network devices, 1Gbps or 10 Gbps uplinks to switches in IDF's to reduce bottlenecks, spanning tree protocol to protect against detrimental loops in the network topology, power over Ethernet (PoE) and Quality of Service (QoS). PoE is a cost effective option that allows data and power to be provided over an Ethernet cable. A PoE enabled switch infrastructure supports the ability to power enterprise wireless devices, modern phone systems that utilize Voice over Internet Protocol (VoIP), and video surveillance cameras. QoS is used to prioritize VoIP traffic allowing voice traffic to take precedence over other network traffic. QoS may also be used to separate non-VoIP network traffic into tiered "buckets" to allow specific traffic to be prioritized.

Apple AirPort wireless access points (WAPs) are installed inside individual classrooms to provide WiFi network connectivity to laptop and mobile devices. Instructional devices, such as printers, iPads, and laptops, have problems consistently connecting to the network. Switch and WAP device configurations were not part of the review. However, it appears the Apple AirPort WAPs are in the default configuration, meant for home use, which will assign DHCP addresses. California school districts have begun to evaluate technology and plan for the common core assessments developed by the Smarter Balanced Assessment Consortium (SBAC) for full implementation in the 2014-2015 school year. The test associated with the common core assessments will be adaptive, meaning that as students complete the test, it will adapt itself by selecting the next question based on the performance of preceding questions. Because of the dynamic nature of adaptive testing, it relies heavily on a well-functioning network. Although the testing software is still under development, it is expected that each participating student will require a device with

a reliable internet connection. Apple AirPort WAPs are designed for home situations with less than 10 devices. With only three channels, these devices are unable to resolve conflicts with other Apple AirPort WAPs, contributing to the unreliability of the district's WiFi network. In contrast, an enterprise WiFi system contains a controller, which allows technology staff to distribute, operate and manage WAPs from a central location. In addition, an enterprise WiFi system could connect many devices in a high-density environment, like a school. A system of this caliber would also ensure all WiFi network connected devices go through the school site Web content filter for Child Internet Protection Act (CIPA) compliance.

During fieldwork, the FCMAT team reviewed the SonicWALL log file and found entries that indicated IP conflicts on the network. Interviews indicated that IP conflict error messages are a frequent problem in the classroom. Apple AirPort WAPs were observed in approximately half of the classrooms that FCMAT observed. Although the individual WAP configurations are not part of the review, the default configuration of these devices, meant for home use, will assign DHCP addresses. If the address assigned by a WAP has already been assigned by another WAP or the SonicWall, an IP conflict will result. An IP conflict between two devices will render one or both of them unusable for network operations.

Several Apple servers are connected to the network infrastructure, including three Mac Pro servers and a Mac X server. The Mac X server is used as a network file server/repository for students and staff, and the Mac Pro servers are used for the FirstClass email system, email archive, and as a proxy server. Proxy servers were used when school sites had slow connections to the Internet and Internet Web sites were fairly static in nature. At present, schools have large capacity connections to the Internet and very few websites are static. Because of high capacity networks and dynamic websites, a proxy server on a school network will slow Internet data to the end user.

The district does not have a network and server monitoring system. Technology staff members rely on other members to communicate when there is a network or server problem. Waiting for staff to notice an issue and contact technology staff disrupts general workflow, decreases administrative staff productivity and hinders learning in the classroom. An effective network and server monitoring software system, like SolarWind or WhatsUp Gold, can check the state of equipment and send text and or email alerts based on set threshold for network responses. The purchase of a network or server monitoring system will enable technology staff to correct network and server problems in a proactive manner.

Recommendations

The district should:

1. Monitor Internet speeds and increase as necessary as network problems are corrected and use of technology expanded.

2. Reconfigure the SonicWALL appliance in the following LAN design: LAN 1, core servers, such as the email server, email archive server, and other curriculum servers; LAN 2, DMZ for future expansion, such as adoption of a centralized network authentication service; LAN 3 classroom devices; and LAN 4, administrative computers and associated storage devices.

3. Reconfigure the internal SonicWALL interface to assign the private DNS server to internal clients and the SonicWALL external interface to use the public DNS server from the local ISP.
4. Reconfigure the SonicWALL appliance to serve as the primary DHCP service and set the lease duration to 12 hours.
5. Replace switches with manageable switches that support 10/100/1000 Mbps ports to the desktop and 1Gbps or 10 Gbps ports for uplinks, spanning tree (for loop detection), PoE, multiple VLANs, QoS and simple network management protocol (SNMP).
6. Configure each Apple Extreme wireless device to operate in "bridge mode" versus "router mode" as an intermediary step.
7. Work with a network engineer to plan and install an enterprise-level WiFi system because of plans to add iPads and laptops by grade level.
8. Remove the proxy server from the network and continue to allow the SonicWALL to provide content filtering.
9. Purchase a network and server monitoring software system.

Technology Security

As educators continue to use technology as a vital component of educating students and administering schools, it is important to safeguard network data and equipment. Compromised data and equipment can cause a wide range of problems, from decreased learning opportunities and productivity to leakage of sensitive information.

Physical Security

Physical security is the most basic protection for network equipment, systems and data. This includes limiting physical access, having a reliable flow of electricity, and having the ability to manage temperature and humidity and recover data.

The district does not have a data center to house major computers systems and telecommunication equipment. The SonicWALL appliance and connection to Cox Communications data circuit are located in a small, unventilated closet underneath a staircase in the administration building. Server equipment is located in the computer lab on top of an exposed shelf and in the storage area below the shelves, exposing the equipment to a high level of student and staff traffic. Standard and best industry practices include controlling and securing all entry points to a data center and limiting access (usually authorized by the superintendent) to prevent theft and accidents that could incapacitate the network. This includes securing doors and windows, and providing dedicated environmental controls to control temperature and humidity and prevent overheating and loss.

Power interruptions and fluctuations during nonschool hours disrupt email services several times a year, and the email system remains down until site personnel intervene. Power outages can be a common issue in some areas, and issues with power delivery should be mitigated with the power company. In cases where power outages are severe and funding is available, districts purchase propane/natural gas generators to run data center equipment, including climate control.

There is only a desktop-level uninterruptible power supply (UPS) for equipment in the administration building closet, and there is no indication that it is regularly tested. Most modern "smart" UPS systems can be set to self-test once a week and email a report. In addition, best practice is to perform a power-off test at least two times a year and keep a log of results to determine when to replace batteries.

There is no secure centralized system for backup of files and documents. Staff members use external hard drives connected by USB cables to the computer for data backup. Backup services should be designed to protect information from damage or theft at a workstation, like a centralized backup system housed in a data center.

Recommendations

The district should:

1. Select a location to provide a secure and climate-controlled data center, such as the electrical closet connected to the backside of room 16. A plan should also be developed to relocate servers and networking equipment to the data center.

2. Contact the local power company to research and mitigate power failures and fluctuations at the school.

3. Purchase a propane/natural gas generator to run full capacity plus 20% of the UPS and climate control in the data center for 48 hours, if outages are severe and funding is available.

4. Size and purchase a UPS system to provide one hour of power to the core network equipment and servers in the data center. If it is not possible to move the Cox Communication data circuit, size and purchase a second UPS system for core network equipment remaining in the administration building.

5. Set UPS devices to self-test once a week and send an email with a report. In addition, the district should perform power off tests at least twice a year and maintain a log of results.

6. Design and implement a secure centralized data storage and backup system, and educate staff and students on the risks and benefits of improper data storage.

Network User Accounts and Services

The district has no directory services, and all passwords are local to computers and services such as email, creating file-sharing and security problems. For example, the file storage server does not require authentication, and student and staff files are deleted, edited or moved without the originator's knowledge. Teachers save documents to the file storage server only if they need to print, and they encourage students to save to local workstations instead of the file storage server. One teacher indicated she does not store anything important on the file server.

Lack of directory services puts the district at increased legal risk. The Family Educational Rights and Privacy Act (FERPA) protects the privacy of student education records. In addition, Education Code 49073-49079.7 states that a school district is not authorized to permit access to pupil records without parental consent. The practice of saving documents to a laptop or an unsecured file storage server increases the chances that student data will unintentionally be released, violating both provisions, and creating many hours of work to remedy the situation.

A directory service, such as Open Directory or Active Directory provides many benefits. It improves workstation security and allows network security policies to be setup by user, limiting internet and network resource access to levels appropriate per duties. It also reduces network management overhead through standardization. A common goal in installing a directory services system is to rely on a single user password for technology services. In addition, directory service settings allow the district to set password standards, as discussed in "Omitted Policies and Procedures."

Recommendation

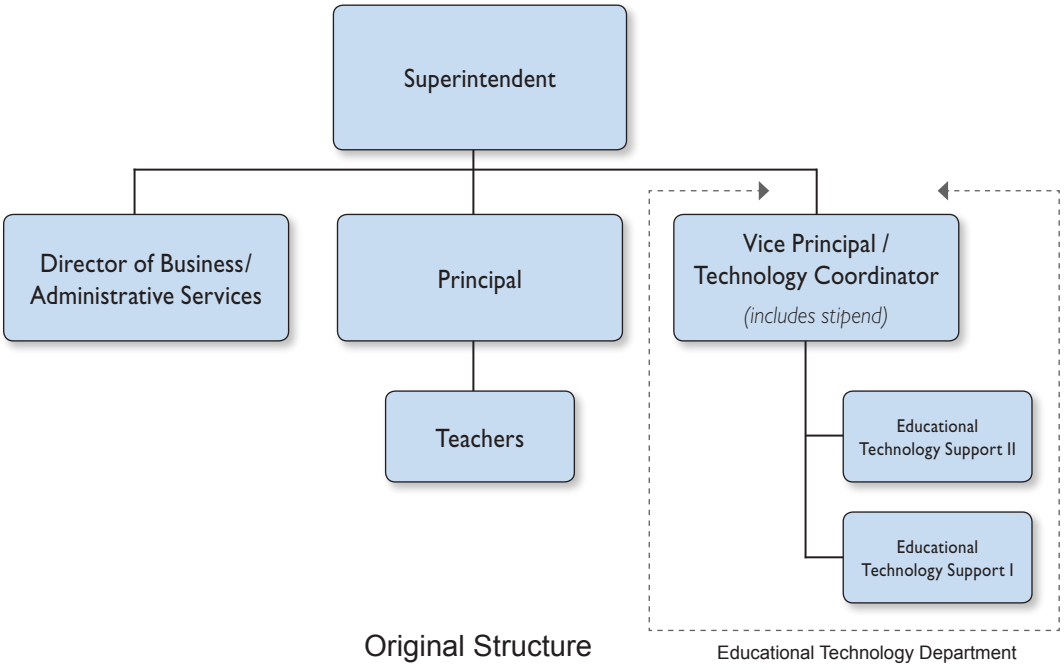
The district should:

1. Select and purchase directory service software and equipment, then design and implement a secure enterprise domain structure for network access that gives each user a unique username, account and password.

Staffing and Organization

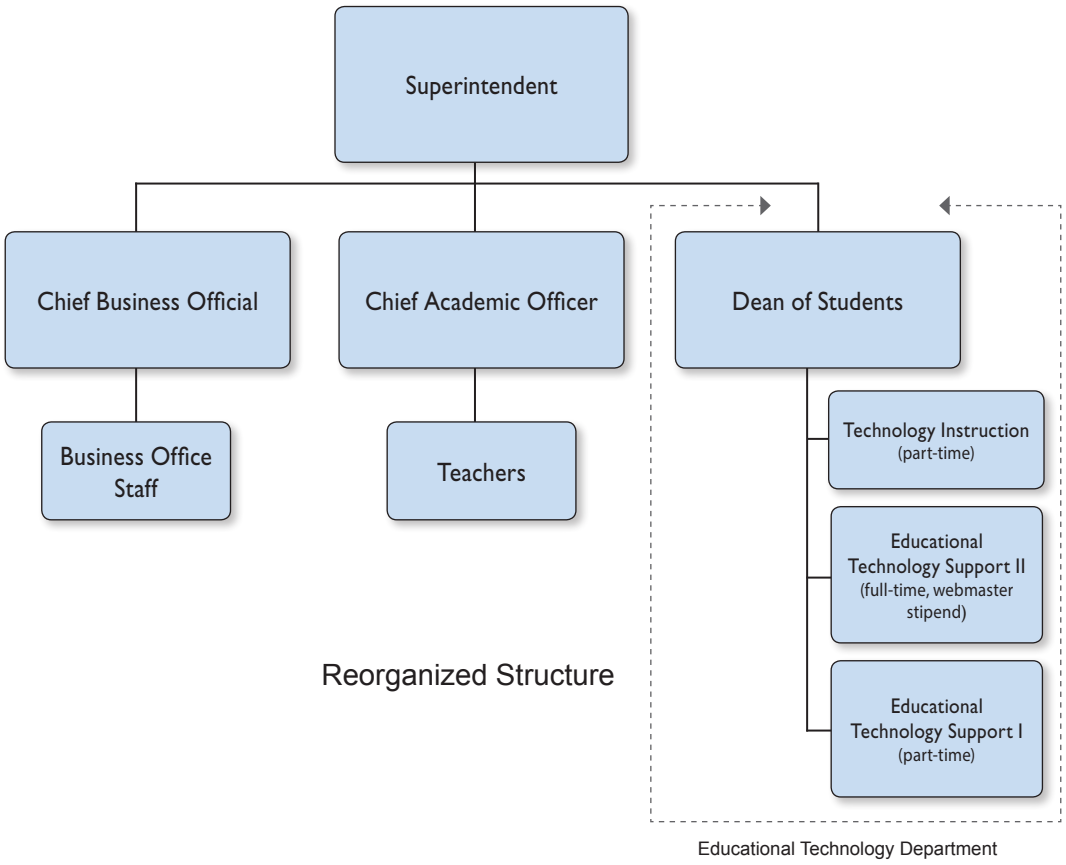
The district has the financial resources to operate a successful 1-to-1 device program for students; however, the Educational Technology Department structure and job descriptions are insufficient to support a large-scale technology project of this type.

The department's original technology organizational structure included three-tier response team to support classroom and administrative technology. The first tier, educational technology support I, provided instruction to students in the use of computers, technology and software. In addition, the position provided basic device support such as resolving application problems. The second tier, educational technology support II, also provided instruction to students in the use of computers, technology and software. In addition, this position troubleshot network problems, monitors network operations and security, performed hardware diagnostics and performed basic telecommunication setup and configuration. The third tier was the technology coordinator position, which managed the technology staff and department and provided student technology instruction. The educational technology support I and II positions did not require a credential and the technology coordinator position did. The following chart depicts the original department structure.



Original Structure

An administration reorganization prompted changes in department staffing. The vice principal/ technology coordinator position was reorganized into the dean of students position. Although the dean of students is full-time, this position retained some of its former technology coordinator duties. This position continues to manage the technology staff and department, and he performs high-level technical tasks such as maintaining the firewall, email and student information system; preparing E-Rate; and approving technology purchase requests. The district hired a credentialed part-time technology instructor who reports to the dean of students to fulfill the instructional duties. The following chart depicts the reorganized department structure.



The staff member employed in the educational technology I position holds a bachelor's degree, but is not credentialed, provides technology education to kindergarten classes and provides general device and network support. The staff member employed in the educational technology II position does not hold a bachelor's degree or credential and provides technology instruction to first through sixth grades. This individual also supports teachers with Web page assistance, lesson plan development, computer and application technical support and student classroom instruction on application use and integration of technology. The person in this position receives a stipend for general webmaster duties performed outside of the normal work week. Under federal law, the Fair Labor standards Act (FLSA), and/or state law, Educated Code sections 45127 and 45128, nonexempt classified employees must be compensated at the overtime rate for time worked beyond eight hours per day or 40 hours per week. The district did not indicate that the staff member is exempt from overtime pay provisions, per the FLSA section 13(a)(17). Because the staff member holds an hourly position and is performing additional duties, the district should consult with legal counsel to determine if the employee is eligible to be paid through a stipend or must be paid at an overtime rate for the webmaster duties. In addition, the educational technology II position helps manage and provides evaluation feedback for the educational technology I position, and the individual in the technology support I position is unclear about who acts as that position's supervisor.

The department's title, Educational Technology Department, and organizational structure do not represent the department's responsibilities to provide technical assistance for instructional and business functions. Technology staff positions and duties do not align with district standards, such as the requirement for instructional staff to hold a credential. A certificated teacher can

more effectively manage student instruction and classroom integration, and a classified technician labor is more efficiently used for technical requests, training and projects. Instructional staff indicated technology instruction in the classroom is not coordinated with the students' current needs. For example, a lesson provided by the technology staff in the middle of the year instructed students to use presentation software; however, the teacher taught students to use this software on the first day of school. To provide classroom technology support, many districts have a teacher on special assignment (TOSA) position that is proficient in technology integration to provide training and integration support to instructional staff. TOSAs often model instructional strategies and approaches to integrating technology into the curriculum for other staff members and provide professional development for major instructional applications. This type of position ideally meets regularly with instructional staff for training and to discuss teaching strategies.

Because of the technology emphasis of district's Strategic Initiative #3, Technology in a 21st Century School, in its strategic plan, the dean of students' duties were restructured to eliminate the prior technology coordinator duties when the dean submitted paperwork for retirement. The dean of students position previously maintained and updated the SIS, and the district has not organized replacement support of this vital system. The dean of students has attempted to manage the new full-time dean of student duties in addition to previous technology coordinator duties, an unusual assignment for this position. As a result, the technology department lacks dedicated structure and guidance. Members of the department believe and operate as though there is an additional level of management. A separate and distinct technology leadership position increases focus on technology vision, communication and management. Such a position also performs leadership duties such as supporting technology goals, leading technology committees, assessing district technology needs, and devising solutions. In addition, in a small district it performs department management duties like managing projects, resources, tasks, staff and department documentation. This position is particularly important in scheduling and prioritizing projects, an important task with limited resources and expanding technology. Overall, a technology leadership position coordinates technology for all branches in the district: technical/network support, information systems, and educational technology.

According to the findings outlined in the "network administration and performance" and "technology security" sections of this report, the district staff is unable to resolve network-level design and security configuration problems. The staff lacks the skill to resolve these problems, and the district does not have sufficient high-level technical work to support a separate position.

Recommendations

The district should:

1. Rename the Educational Technology Department to the Technology Services Department.

2. Reassign management of the Technology Services Department to either the chief business official (CBO) or superintendent, as determined by the superintendent. A sample organizational chart is attached as Appendix C to this report.

3. Develop a technology support specialist I position instead of the educational technology support I position and a technology support specialist II position instead of the educational technology support II position. The revised positions should focus on technical and application support, omit instructional

and integration duties, and assign webmaster duties as part of the normal workweek. Sample job descriptions attached as Appendix D to this report.

4. Develop a TOSA position, such as a district technology lead teacher to provide site-level peer support in using technology in the classroom, classroom integration and application instruction to students. This lead teacher can be released full- or part- time to provide any necessary in-classroom support. This position should take the place of the technology instruction position.

5. Reassign SIS duties according to the revised job descriptions. The technology support specialist II position should perform setup, configuration, maintenance and data entry duties. Tasks such as scheduling should be performed by the dean of students. The dean of students, as CALPADS coordinator, should oversee state and local reporting with assistance from the technical staff to create reports and resolve errors within the system.

6. Create the new position of director technology to establish and maintain technology goals; coordinate with district administrators and departments; manage the department budget; provide leadership and guidance to the district in application and hardware acquisition, adoption, support and staff development; and manage and evaluate technology staff and projects. A sample job description is attached as Appendix D to this report.

7. Develop regular meetings between technicians and the director of technology to regularly communicate needs and discuss interdepartmental updates and projects.

8. Provide the technicians with the training and assistance necessary to support the technologies assigned under the new job descriptions.

9. Temporarily contract with a network engineer or network administrator consultant to correct the findings detailed in this report, and train the technical support specialist II to provide the necessary ongoing support and maintenance of the network and related systems.

Appendices

A. – Study Agreement

B. – Sample Policies and Procedures

C. – Sample Organizational Charts

D. – Sample Job Descriptions

Appendix A. - Study Agreement

FCMAT
FISCAL CRISIS & MANAGEMENT ASSISTANCE TEAM
CSIS California School Information Services

FISCAL CRISIS & MANAGEMENT ASSISTANCE TEAM
STUDY AGREEMENT
AMENDED FEBRUARY 21, 2012

The FISCAL CRISIS AND MANAGEMENT ASSISTANCE TEAM (FCMAT), hereinafter referred to as the Team, and the Montecito Union School District, hereinafter referred to as the District, mutually agree as follows:

1. BASIS OF AGREEMENT

The Team provides a variety of services to school districts and county offices of education upon request. The District has requested that the Team provide for the assignment of professionals to study specific aspects of the Montecito Union School District operations. These professionals may include staff of the Team, County Offices of Education, the California State Department of Education, school districts, or private contractors. All work shall be performed in accordance with the terms and conditions of this Agreement.

In keeping with the provisions of AB1200, the County Superintendent will be notified of this agreement between the District and FCMAT and will receive a copy of the final report. The final report will be published on the FCMAT website.

2. SCOPE OF THE WORK

A. Scope and Objectives of the Study

The scope and objectives of this study are to:

1. Review the staffing for technology service delivery and make recommendations for improvement.
2. Review the delivery of instructional technology support services and make recommendations for improvement.
3. Review the delivery of administrative technology support services and make recommendations for improvement.

2.1 AMENDED SCOPE OF THE WORK, FEBRUARY 21, 2012

1. Review the staffing for technology service delivery and make recommendations for improvement.
2. Review the delivery of instructional technology support services and make recommendations for improvement.
3. Review the delivery of administrative technology support services and make recommendations for improvement.
4. Review the organizational structure for technology services delivery and make recommendations for improvement.

B. Services and Products to be Provided

Orientation Meeting - The Team will conduct an orientation session at the District to brief District management and supervisory personnel on the procedures of the Team and on the purpose and schedule of the study.

On-site Review - The Team will conduct an on-site review at the District office and at school sites if necessary.

1. Exit Report - The Team will hold an exit meeting at the conclusion of the on-site review to inform the District of significant findings and recommendations to that point.

2. Exit Letter - The Team will issue an exit letter approximately 10 days after the exit meeting detailing significant findings and recommendations to date and memorializing the topics discussed in the exit meeting.

3. Draft Reports - Electronic copies of a preliminary draft report will be delivered to the District administration for review and comment.

4. Final Report - Electronic copies of the final study report will be delivered to the District administration following completion of the review. Written copies are available by contacting the FCMAT office.

5. Follow-Up Support – Six months after the completion of the study, FCMAT will return to the District, if requested, to confirm the District's progress in implementing the recommendations included in the report, at no cost. Status of the recommendations will be documented to the District in a FCMAT Management Letter.

3. PROJECT PERSONNEL

The study team will be supervised by Anthony L. Bridges, CFE, Deputy Executive Officer, Fiscal Crisis and Management Assistance Team, Kern County Superintendent of Schools Office. The study team may also include:

A. Andrew Prestage	*FCMAT Management Analyst*
B. To Be Determined	*FCMAT Technology Consultant*
C. To Be Determined	*FCMAT Technology Consultant*

Other equally qualified consultants will be substituted in the event one of the above noted individuals is unable to participate in the study.

4. PROJECT COSTS

The cost for studies requested pursuant to E.C. 42127.8(d)(1) shall be:

A. $500.00 per day for each Team Member while on site, conducting fieldwork at other locations, preparing and presenting reports, or participating in meetings.

B. All out-of-pocket expenses, including travel, meals, lodging, etc. The District will be invoiced at actual costs, with 50% of the estimated cost due following the completion of the on-site review and the remaining amount due upon acceptance of the final report by the District.

Based on the elements noted in section 2 A, the total cost of the study is estimated at $6,000.

C. Any change to the scope will affect the estimate of total cost.

4.1 AMENDED PROJECT COSTS

Due to changes to the scope of work, the total cost of the study is amended to $7,500.

Payments for FCMAT services are payable to Kern County Superintendent of Schools - Administrative Agent.

5. RESPONSIBILITIES OF THE DISTRICT

A. The District will provide office and conference room space while on-site reviews are in progress.

B. The District will provide the following (if requested):

1. A map of the local area
2. Existing policies, regulations and prior reports addressing the study request
3. Current or proposed organizational charts
4. Current and two (2) prior years' audit reports
5. Any documents requested on a supplemental listing
6. Any documents requested on the supplemental listing should be provided to FCMAT in electronic format when possible.
7. Documents that are only available in hard copy should be scanned by the district and sent to FCMAT in an electronic format.
8. All documents should be provided in advance of field work and any delay in the receipt of the requested documentation may affect the start date of the project.

C. The District Administration will review a preliminary draft copy of the study. Any comments regarding the accuracy of the data presented in the report or the practicability of the recommendations will be reviewed with the Team prior to completion of the final report.

Pursuant to EC 45125.1(c), representatives of FCMAT will have limited contact with pupils. The District shall take appropriate steps to comply with EC 45125.1(c).

6. PROJECT SCHEDULE

The following schedule outlines the planned completion dates for key study milestones:

Orientation:	***to be determined***
Staff Interviews:	***to be determined***
Exit Interviews:	***to be determined***
Preliminary Report Submitted:	***to be determined***
Final Report Submitted:	***to be determined***
Board Presentation:	***to be determined***
Follow-Up Support:	***If requested***

7. **CONTACT PERSON**

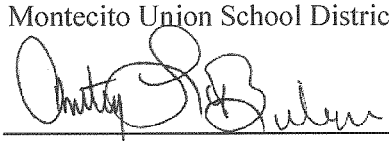
Name of contact person: Virginia Alvarez, Chief Business Official

Telephone: (805) 969-3249 FAX: _____

E-Mail: valvarez@montecitou.org

_____

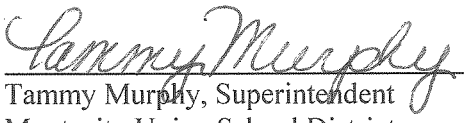
Tammy Murphy, Superintendent Date
Montecito Union School District



January 17, 2012

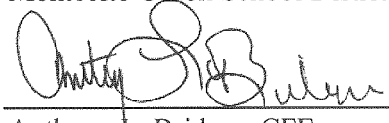
Anthony L. Bridges, CFE Date
Deputy Executive Officer
Fiscal Crisis and Management Assistance Team

APPROVAL OF AMENDMENT DATED FEBRUARY 21, 2012



2-21-12

Tammy Murphy, Superintendent Date
Montecito Union School District



February 21, 2012

Anthony L. Bridges, CFE Date
Deputy Executive Officer
Fiscal Crisis and Management Assistance Team

Appendix B. - Sample Policies and Procedures

CSBA Sample

Administrative Regulation

District Records

AR 3580
Business and Noninstructional Operations

***Note: The following optional administrative regulation reflects classification and retention requirements for district records. Student records, including the contents and retention of such records, are governed by the Family Educational Rights and Privacy Act (20 USC 1232g; 34 CFR 99.1-99.8; Education Code 49069; 5 CCR 430-433); see BP/AR 5125 - Student Records. In addition, as a local governmental entity, the district is required to grant public access to certain records in accordance with the Public Records Act (Government Code 6252-6270); see BP/AR 1340 - Access to District Records. ***

Classification of Records

***Note: Pursuant to 5 CCR 16020, only those documents that are prepared or retained as part of the discharge of official duty are considered a "record" that must be classified and retained. In addition, under the Public Records Act (Government Code 6252), a "public record" is defined as any writing relating to the conduct of district business that is prepared, owned, used, or retained by the district; see BP/AR 1340 - Access to District Records. Documents and other writings that are not prepared or used by the district in the conduct of district business are generally not considered a "record" and thus are not subject to the requirements of this regulation. ***

Records means all records, maps, books, papers, and documents of a school district required by law to be prepared or retained as necessary or convenient to the discharge of official duty. (5 CCR 16020)

(cf. 1340 - Access to District Records)

Before January 1, the Superintendent or designee shall review the prior year's records and shall classify them as either a Class 1 (Permanent), Class 2 (Optional), or Class 3 (Disposable) record. (5 CCR 16022)

Records of continuing nature (active and useful for administrative, legal, fiscal, or other purposes over a period of years) shall not be classified until such usefulness has ceased. (5 CCR 16022)

An inventory of equipment shall be a continuing record and shall not be classified until the inventory is superseded or until the equipment is removed from district ownership. (5 CCR 16022)

(cf. 3440 - Inventories)

A student's cumulative record is a continuing record until the student ceases to be enrolled in the district. (5 CCR 16022)

(cf. 5125 - Student Records)

When an electronic or photographed copy of a Class 1 (Permanent) record has been made, the copy may be classified as Class 1 (Permanent) and the original classified as either Class 2 (Optional) or Class 3 (Disposable). However, no original record that is basic to any required audit may be destroyed prior to the second July 1st succeeding the completion of the audit. (Education Code 35254)

Class 1 - Permanent Records

The original of each of the following records, or one exact copy of it when the original is required by law to be filed with another agency, is a Class 1 (Permanent) record and shall be retained indefinitely unless microfilmed in accordance with 5 CCR 16022: (5 CCR 16023)

1. Annual Reports

a. Official budget

b. Financial reports of all funds, including cafeteria and student body funds

c. Audit of all funds

d. Average daily attendance, including Period 1 and Period 2 reports

e. Other major annual reports, including:

(1) Those containing information relating to property, activities, financial condition, or transactions

(2) Those declared by Governing Board minutes to be permanent

(cf. 3100 - Budget)
(cf. 3452 - Student Activity Funds)
(cf. 3460 - Financial Reports and Accountability)
(cf. 3551 - Food Service Operations/Cafeteria Fund)

2. Official Actions

a. Minutes of the Board or Board committees, including the text of rules, regulations, policies, or resolutions included by reference only

b. The call for and the result of any elections called, conducted, or canvassed by the Board

c. Records transmitted by another agency pertaining to its action with respect to district reorganization

(cf. 7214 - General Obligation Bonds)
(cf. 9324 - Minutes and Recordings)

3. Personnel Records

Class 1 (Permanent) records include all detailed records relating to employment; assignment; amounts and dates of service rendered; termination or dismissal of an employee in any position; sick leave record; rate of compensation, salaries, or wages paid; and deductions or withholdings made and the person or agency to whom such amounts were paid. In lieu of the detailed records, a complete proven summary payroll record for each employee containing the same data may be classified as Class 1 (Permanent) and the detailed records may then be classified as Class 3 (Disposable).

Information of a derogatory nature as defined in Education Code 44031 shall be Class 1 (Permanent) only when the time for filing a grievance has passed or the document has been sustained by the grievance process.

(cf. 4112.6/4212.6/4312.6 - Personnel Files)
(cf. 4112.62/4212.62/4312.62 - Maintenance of Criminal Offender Records)

4. Student Records

The records of enrollment and scholarship for each student required by 5 CCR 432 and all records pertaining to any accident or injury involving a minor for which a claim for damages had been filed as required by law shall be classified as Class 1 (Permanent) records. This includes any related policy of liability insurance except that these records cease to be Class 1 (Permanent) one year after the claim has been settled or the statute of limitations has expired.

(cf. 5111.1 - District Residency)
(cf. 5141 - Health Care and Emergencies)
(cf. 5143 - Insurance)

5. Property Records

Class 1 (Permanent) records include all detailed records relating to land, buildings, and equipment. In lieu of detailed records, a complete property ledger may be classified as Class 1 (Permanent). The detailed records may then be classified as Class 3 (Disposable) if the property ledger includes all fixed assets; an equipment inventory; and, for each piece of property, the date of acquisition, name of previous owner, a legal description, the amount paid, and comparable data if the unit is disposed of.

(cf. 3280 - Sale or Lease of District-Owned Real Property)

Class 2 - Optional Records

Any record considered temporarily worth keeping, but which is not a Class 1 record, may be classified as Class 2 (Optional) and shall be retained until it is reclassified as Class 3 (Disposable). If by agreement of the Board and Superintendent or designee, classification of the prior year records has not been made before January 1 as specified in 5 CCR 16022, all records of the prior year may be classified Class 2 (Optional) pending further review and classification within one year. (5 CCR 16024)

Class 3 - Disposable Records

All records not classified as Class 1 (Permanent) or as Class 2 (Optional) shall be classified as Class 3 (Disposable). These include, but are not limited to, detailed records basic to audit, including those relating to attendance, average daily attendance, or business or financial transactions; detailed records used in preparing another report; teachers' registers if all information required by 5 CCR 432 is retained in other records or if the General Records pages are removed from the register and classified as Class 1 (Permanent); and periodic reports, including daily, weekly, and monthly reports, bulletins, and instructions. (5 CCR 16025)

All Class 3 (Disposable) records shall be destroyed during the third school year after the school year in which the records originated. In addition, Class 3 (Disposable) records shall not be destroyed until after the third school year following the completion of any legally required audit or the retention period required by any agency other than the State of California, whichever is later. A continuing record shall not be destroyed until the fourth year after it has been classified as Class 3 (Disposable). (5 CCR 16026, 16027)

(cf. 5113.2 - Work Permits)

(9/88 10/96) 11/09

CSBA Sample

Board Policy

District Records

BP 3580
Business and Noninstructional Operations

***Note: The following optional policy and accompanying administrative regulation address the classification and retention of district records pursuant to 5 CCR 16020-16027 and may be modified to reflect district practice. For additional requirements pertaining to student records, including the contents and retention of such records pursuant to the Family Educational Rights and Privacy Act (20 USC 1232g; 34 CFR 99.1-99.8; Education Code 49069; 5 CCR 430-433), see BP/AR 5125 - Student Records. For requirements pertaining to public access to certain records in accordance with the Public Records Act (Government Code 6252-6270), see BP/AR 1340 - Access to District Records. ***

The Governing Board recognizes the importance of securing and retaining district documents. The Superintendent or designee shall ensure that district records are developed, maintained, and disposed of in accordance with law, Board policy, and administrative regulation.

(cf. 1340 - Access to District Records)
(cf. 3440 - Inventories)

***Note: 5 CCR 16020 defines a record as any paper or document which the district is required to maintain or which the district prepares or maintains as necessary to the discharge of official duty. 5 CCR 16022 requires the Superintendent or designee to annually review and classify these "record" documents and papers in order to determine their required length of retention. Depending on the content, electronic communications such as email may also be considered "records" and thus are subject to the same classification and retention schedule as paper documents. ***

***Note: AB 5 (Ch. 5, Statutes of 2009) creates the California Electronic Discovery Act and amends Code of Civil Procedure 2031.010 to make the procedural rules requiring the disclosure of documents to the opposing party in litigation applicable to electronically stored information. These state rules are similar to federal Rules of Civil Procedure adopted in 2007 that apply to actions in federal courts and which also include provisions related to electronically stored information. In general, the rules require parties in litigation to identify and disclose potentially relevant electronic information and, upon notification by district legal counsel of pending or anticipated litigation, halt the routine destruction of paper or electronic records (e.g., suspend automatic monthly erasure of back-up tapes) that could be potentially relevant (a "litigation hold"). ***

***Note: It is important that districts have an efficient and consistent system in place for discarding those documents, including email, that are not considered "records." Such a system

may help reduce storage costs but may also help prevent unnecessary disclosure. For example, Government Code 6254 exempts from disclosure "preliminary drafts" not retained by the district. The purpose of this exemption is to allow a measure of confidentiality for pending district action. However, if preliminary drafts are not regularly discarded, then they may be considered a "record" that has been retained by the district and thus subject to disclosure under the Public Records Act. ***

***Note: The following optional paragraph directs the Superintendent or designee to create a document management system which includes a process for the storage and destruction of electronic materials. Each district will need to do an analysis of the type of system needed based on the size of the district, number of school sites, number of employees, and the type, practice, and capability of the district's information technology system. ***

The Superintendent or designee shall consult with district legal counsel, site administrators, district information technology staff, personnel department staff, and others as necessary to develop a secure document management system that provides for the storage, retrieval, archiving, and destruction of district documents, including electronically stored information such as email. This document management system shall be designed to comply with state and federal laws regarding security of records, record retention and destruction, response to "litigation hold" discovery requests, and the recovery of records in the event of a disaster or emergency.

(cf. 0440 - District Technology Plan)
(cf. 3516 - Emergencies and Disaster Preparedness Plan)
(cf. 4040 - Employee Use of Technology)
(cf. 9011 - Board Member Electronic Communications)

The Superintendent or designee shall ensure the confidentiality of records as required by law and shall establish regulations to safeguard data against damage, loss, or theft.

(cf. 4112.6/4212.6/4312.6 - Personnel Files)
(cf. 5125 - Student Records)
(cf. 5125.1 - Release of Directory Information)

The Superintendent or designee shall ensure that employees receive information about the district's document management system, including retention and confidentiality requirements and an employee's obligations in the event of a litigation hold established on the advice of legal counsel.

(cf. 4131 - Staff Development)
(cf. 4231 - Staff Development)
(cf. 4331 - Staff Development)

Safe at Home Program

***Note: The Secretary of State's Safe at Home program creates a confidential address and mail-forwarding program for victims of domestic violence, stalking, or sexual assault.

Government Code 6207 provides that, when creating a public record, the district must not include actual residences of students, parents/guardians, or employees when a substitute address is designated through the Safe at Home program. Districts are required to accept the program participation card issued by the Secretary of State and to substitute a post office box as the participant's address. ***

District public records shall not include the actual addresses of students, parents/guardians, or employees when a substitute address is designated by the Secretary of State pursuant to the Safe at Home program. (Government Code 6206, 6207)

***Note: According to the Secretary of State, a participant's confidential, actual address may only be used to establish student enrollment eligibility and for school emergency purposes. Pursuant to Government Code 6207, a participant's confidential, actual address is not a public record and should not be made available to anyone under any circumstances. See also AR 5111.1 - District Residency. ***

When a substitute address card is provided pursuant to this program, the confidential, actual address may be used only to establish district residency requirements for enrollment and for school emergency purposes.

(cf. 5111.1 - District Residency)
(cf. 5141 - Health Care and Emergencies)

Legal Reference:
EDUCATION CODE
35145 Public meetings
35163 Official actions, minutes and journal
35250-35255 Records and reports
44031 Personnel file contents and inspection
49065 Reasonable charge for transcripts
CODE OF CIVIL PROCEDURE
2031.010-2031.060 Civil Discovery Act, scope of discovery demand
2031.210-2031.320 Civil Discovery Act, response to inspection demand
GOVERNMENT CODE
6205-6211 Confidentiality of addresses for victims of domestic violence, sexual assault or stalking
6252-6265 Inspection of public records
12946 Retention of employment applications and records for two years
PENAL CODE
11170 Retention of child abuse reports
CODE OF REGULATIONS, TITLE 5
432 Varieties of student records
16020-16022 Records, general provisions
16023-16027 Retention of records

Management Resources:
SECRETARY OF STATE PUBLICATIONS
Letter re: California Confidential Address Program Implementation (SB 489), August 27, 1999
WEB SITES
California Secretary of State: http://www.ss.ca.gov/safeathome

(3/01 11/06) 11/09

Procedures for Ordering Computers:

Please follow the procedures outlined below when ordering computers and submit PR's only for district approved standard models.

Dell Ordering Procedures
Select a Standard Quote Click on the above Link
Attach Dell Quote to PR-if more than 1 device is needed, change quantity on PR
Microsoft Office is already included on the Dell Quotes
Laptops and Netbooks Only – CUSD Logo Engraving $20.66 per system – automatic charge to same site account in which the laptops are being purchased, no separate PR is needed
Once all PR's are created and signed by site administrator, paperclip together and send to Ed Division to be signed and processed.

IMPORTANT: ALL software purchases (other than Microsoft Office) must be on a separate PR from any hardware purchases

If you would like a computer system or an upgrade that is not available via the standard quotes or the Dell website, please contact **Angelica P. Gutierrez** in CUSD Purchasing for your special order. For all Software quotes contact **Angelica P. Gutierrez** in CUSD Purchasing.

Rationalization for Technology Standardizations

Standardization enhances TIS' ability to support the site staff and the hardware. As TIS evaluated the standards it became clear that increasing interoperability and decreasing non-standard hardware was imperative. As staffing levels have decreased and computer hardware has increased it is important to do more with less. Staff will be able to create standard images that can be deployed at all the school sites. Repairs will be handled in a more efficient manner, due to the limited hardware diversity.

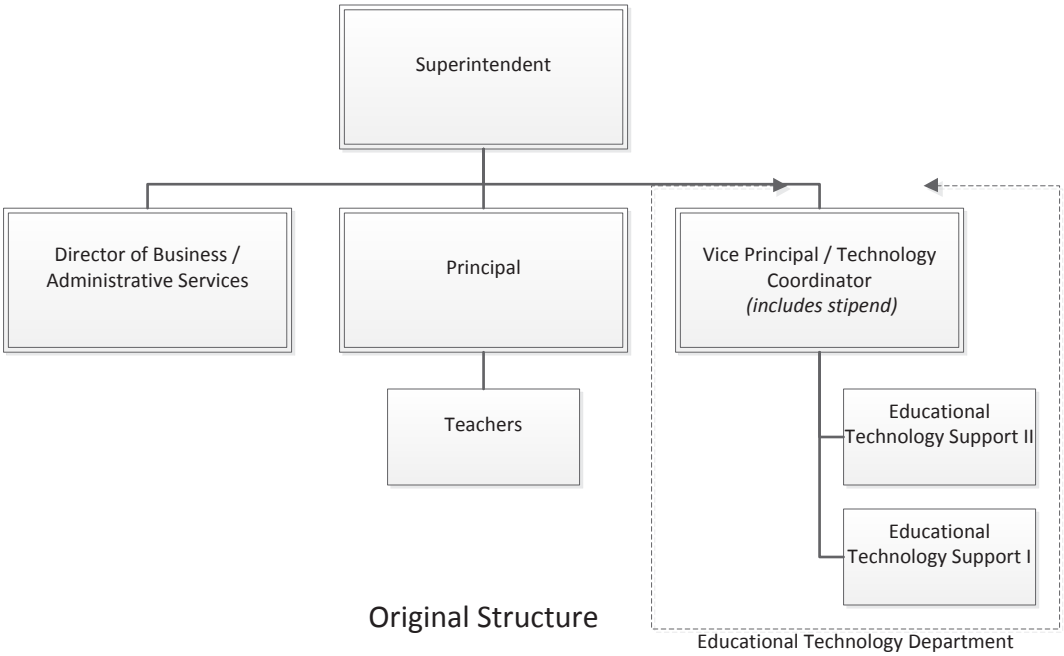
CUSD firmly believes that increasing standardization, including single-platform support will increase our efficiency for the students.

Dell CUSD Approved Systems
Latitude E5520 – laptop standard model
Optiplex 790 – desktop standard model for admin and teachers
Optiplex 790 – desktop high-end multimedia model (this is a system that must be quoted separately)
Optiplex 390 – desktop standard model for classrooms and labs

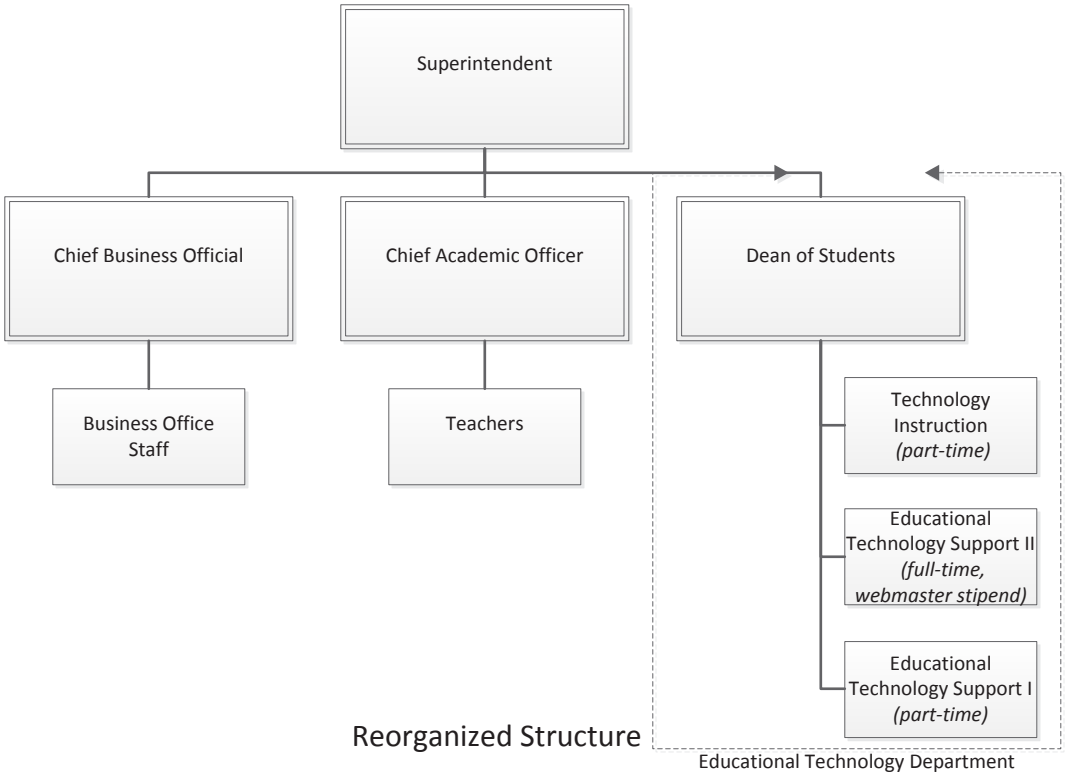
Specifications of each model are found on the myCUSD – CUSD Technology Hardware Ordering Procedures webpage

Updated 4/5/12

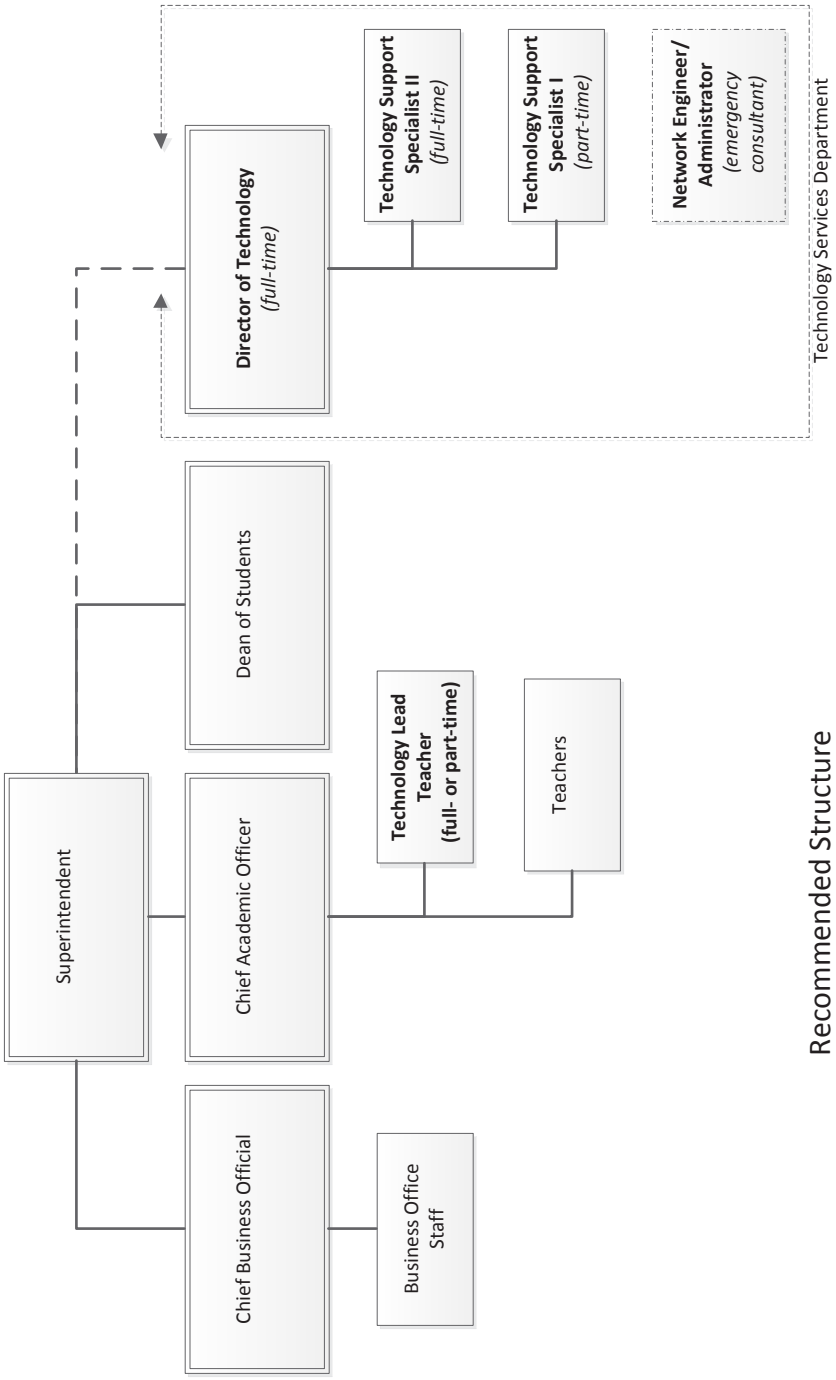
Appendix C. - Sample Organzational Charts



Original Structure



Reorganized Structure



Recommended Structure

Appendix D. - Sample Job Descriptions

Samples are included for the purpose of providing information regarding necessary education, experience, knowledge, skills and abilities only. Prior to adopting new or revised job descriptions, the district should ensure the descriptions meet all legal requirements.

CAPISTRANO UNIFIED SCHOOL DISTRICT
San Juan Capistrano, California

EXECUTIVE DIRECTOR, TECHNOLOGY & INFORMATION SERVICES

DEFINITION
Under direction of Business Services, plan, recommend, organize, direct district-wide information and computer operating systems; provide leadership and guidance in the implementation of technology. Develop and oversee a department budget; coordinate contract services; and general oversight responsibility for classroom/school site technology. Collaborate with sites and district departments on technology-related issues; manage professional and technical staff.

EXAMPLES OF DUTIES
- Provides leadership and direction in district-wide technology planning, computer acquisition, applications development, and computer operations to increase access to information and facilitate productivity.
- Consults with division managers to develop network and communication solutions and data services that integrate computer systems for information processing and data sharing.
- Directs development of information systems including database management, business, and financial applications to improve operations and delivery of instruction.
- Develops and implements departmental goals, priorities and procedures.
- Monitors data security to ensure the integrity and reliability of computerized information systems.
- Directs the continuous improvement of the information and technical system staff, equipment and systems to maintain pace with district needs.
- Oversees an annual budget and establish controls to stay within the limits of that budget.
- Prepares for and follows up on technology-related audits.
- Coordinates student and staff events, promoting the use of instructional technology.
- Oversees bid requests, proposals, and vendor contracts.
- Supervises and evaluate department certificated and classified management personnel.
- Performs other duties as assigned.

QUALIFICATIONS
Knowledge of:
Current K-12 instructional practices; principles and techniques of educational technology; principles and techniques for project planning, scheduling and control; public sector business practices; emerging trends in instructional technology, and management of budget planning and oversight.

Ability to:
Supervise, coordinate, and direct managers, teachers, classified staff, advisory groups, and other stakeholders; communicate clearly and concisely, orally and in writing; develop sound strategies to accomplish objectives; incorporate new technology into future plans; facilitate and lead change; comply with the District's customer service standards, as outlined in Board Policy.

Experience:
Demonstrates strong management/leadership skills. A minimum of five years experience at site or district level coordinating technology integration into instruction or management of technology/information systems.

Education
Current California teaching credential.
Educational Administrative Services credential.
Masters degree in related area or postgraduate educational technology coursework preferred.

6/09; 11/09;8/11

CAPISTRANO UNIFIED SCHOOL DISTRICT **Range 41**
San Juan Capistrano, California

TECHNOLOGY SUPPORT SPECIALIST I

DEFINITION

Under general supervision, to provide technology support in the operation, maintenance and support of a computer network including all computers, software, and peripherals; install and configure personal computer equipment; install and configure necessary software applications; perform related work as required; provide assistance, direction and training to users and school site staff; work at various sites to troubleshoot problems with servers, network equipment, workstations, printers and software; communicate with District and site support staff on technical issues.

EXAMPLES OF DUTIES

The following duties are typical for this classification. Incumbents may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.

1. Operates and maintains a variety of equipment including computers, printers, network servers, and other networking equipment.
2. Reviews hardware and software requirements.
3. Responds to hardware and software service requests.
4. Sets up and configures new and existing instructional and administration Windows and Macintosh computers.
5. Installs software on new and used Windows and Macintosh systems.
6. Provides desktop support services to maintain optimum system operations including preventative maintenance.
7. Troubleshoots computer and printer problems.
8. Performs preventative maintenance on hardware and software; performs basic hardware repair; may provide limited support and scheduling duties for the video distribution system.
9. Assists in the basic maintenance, upgrades, and security of the District's various Local Area Networks (LAN).
10. Installs and configures Microsoft and Apple servers for network placement.
11. Installs and configures networked applications.
12. Installs and performs basic configuration of network switches and hubs.
13. Troubleshoots and resolves basic network problems.
14. Maintains records on all computer installations and technology service requests; maintains equipment and software inventory.
15. Coordinates networking data wiring layouts and additions.
16. Works with vendors on software and hardware installations, troubleshooting, administration and maintenance.
17. Creates documentation and other technical documents.
18. May provide cell phone support for District staff; assists users with cell phone and PDA setup and troubleshooting.
19. May assist with the administration of the laptop program; configures, distributes, updates, and monitors laptops for District staff.
20. Provides assistance with District technology initiatives as needed.
21. Performs other related duties as required.

QUALIFICATIONS

Knowledge of:

Methods, tools and equipment used in the installation and service of hardware and software; Windows and Macintosh computer operating systems and Microsoft Office suite; current computer network

technology; basic industry-standard networking principles; basic understanding of networking protocols, hardware and technology; understanding of physical wiring standards including CAT-5 and fiber optics.

Ability to:

Install computers, printers and other peripheral devices; install and test software and hardware; assist with the maintenance and troubleshooting of network hardware and software; communicate clearly and concisely both oral and written; demonstrate good interpersonal skills to work with students, teachers, administrators, supervisors, co-workers and vendors; learn new skills to keep current with technology changes; instruct others in the use and care of computer technology and software; adapt to changing technologies and learn functionality of new equipment and systems; work with limited supervision; multi-task while maintaining patience and flexibility; manage time effectively between multiple sites; understand and carry out oral and written instructions; establish and maintain cooperative working relationships; comply with the District's customer service standards, as outlined in Board policy.

Education/Experience:

Any combination equivalent to: Completion of the twelfth grade supplemented by training and/or coursework in computer and network operations. Associates degree preferred but not required; and one year of computer related experience or any combination of experience and coursework in such areas as installation, configuration, troubleshooting, and repair of computer hardware, software and peripheral devices preferably in a networked environment. MCP/MCSE preferred but not required.

License/Certificate Requirement:

Possession of a valid California Driver's License.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT

The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

Environment: Work is performed primarily in a standard office setting.

Physical: Primary functions require sufficient physical ability and mobility to work in an office setting; to stand or sit for prolonged periods of time; to occasionally stoop, bend, kneel, crouch, reach, and twist; to lift, carry, push, and/or pull light to moderate amounts of weight; to operate computer equipment requiring repetitive hand movement and fine coordination including use of a computer keyboard; and to verbally communicate to exchange information.

Vision: See in the normal visual range with or without correction.

Hearing: Hear in the normal audio range with or without correction.

10/03
Revised 9/03;4/06;7/07

CAPISTRANO UNIFIED SCHOOL DISTRICT **Range 44**
San Juan Capistrano, California

TECHNOLOGY SUPPORT SPECIALIST II

DEFINITION

Under general supervision, to provide technology support in the operation, maintenance and support of a computer network including all computers, software, and peripherals; install and configure personal computer equipment; install and configure necessary software applications; perform related work as required; provide assistance, direction and training to users, TIS staff, and school site staff; work at various sites to troubleshoot problems with servers, network equipment, workstations, printers and software; communicate with District and site support staff on technical issues.

EXAMPLES OF DUTIES

The following duties are typical for this classification. Incumbents may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.

1. Operates and maintains a variety of equipment including computers, printers, network servers, and other networking equipment.
2. Reviews hardware and software requirements.
3. Provides leadership to other technology support staff.
4. Responds to hardware and software service requests.
5. Sets up and configures new and existing instructional and administration Windows and Macintosh computers.
6. Installs software on new and used Windows and Macintosh systems.
7. Provides desktop support services to maintain optimum system operations including preventative maintenance.
8. Troubleshoots computer and printer problems.
9. Performs preventative maintenance on hardware and software; performs basic hardware repair; may provide limited support and scheduling duties for the video distribution system.
10. Assists in the maintenance, upgrades, and security of the District's various Local Area Networks (LAN).
11. Installs and configures of Microsoft and Apple servers for network placement.
12. Installs and configures networked applications.
13. Installs and performs basic configuration of network switches and hubs.
14. Troubleshoots and resolves basic to intermediate network problems.
15. Maintains records on all computer installations and technology service requests; maintains equipment and software inventory.
16. Coordinates networking data wiring layouts and additions.
17. Works with vendors on software and hardware installations, troubleshooting, administration and maintenance.
18. Creates documentation and other technical documents.
19. May provide cell phone support for District staff; assists users with cell phone and PDA setup and troubleshooting.
20. May assist with the administration of the laptop program; configures, distributes, updates, and monitors laptops for District staff.
21. Provides assistance with District technology initiatives as needed.
22. Performs other related duties as required.

QUALIFICATIONS

Knowledge of:

Methods, tools and equipment used in the installation and service of hardware and software; Windows and Macintosh computer operating systems and Microsoft Office suite; current computer network

CAPISTRANO UNIFIED SCHOOL DISTRICT
Technology Support Specialist II – *Page 2*

technology; basic industry-standard networking principles; basic understanding of networking protocols, hardware and technology; understanding of physical wiring standards including CAT-5 and fiber optics.

Ability to:

Install computers, printers and other peripheral devices; install and test software and hardware; assist with the maintenance and troubleshooting of network hardware and software; communicate clearly and concisely both oral and written; demonstrate good interpersonal skills to work with students, teachers, administrators, supervisors, co-workers and vendors; learn new skills to keep current with technology changes; instruct others in the use and care of computer technology and software; adapt to changing technologies and learn functionality of new equipment and systems; work with limited supervision; multi-task while maintaining patience and flexibility; manage time effectively between multiple sites; understand and carry out oral and written instructions; establish and maintain cooperative working relationships; comply with the District's customer service standards, as outlined in Board policy.

Education/Experience:

Any combination equivalent to: Completion of the twelfth grade supplemented by training and/or coursework in computer and network operations. Associates degree preferred but not required; and two years of computer related experience or any combination of experience and coursework in such areas as installation, configuration, troubleshooting, and repair of computer hardware, software and peripheral devices preferably in a networked environment. MCP/MCSE preferred but not required.

License/Certificate Requirement:

Possession of a valid California Driver's License.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT

The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential job functions.

Environment: Work is performed primarily in a standard office setting.

Physical: Primary functions require sufficient physical ability and mobility to work in an office setting; to stand or sit for prolonged periods of time; to occasionally stoop, bend, kneel, crouch, reach, and twist; to lift, carry, push, and/or pull light to moderate amounts of weight; to operate computer equipment requiring repetitive hand movement and fine coordination including use of a computer keyboard; and to verbally communicate to exchange information.

Vision: See in the normal visual range with or without correction.

Hearing: Hear in the normal audio range with or without correction.

10/03
Revised 9/03;4/06;7/07