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

Roseville City School District

Technology Review

March 28, 2014

Joel D. Montero
Chief Executive Officer

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FISCAL CRISIS & MANAGEMENT
ASSISTANCE TEAM
CSIS California School Information Services

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Richard Pierucci, Superintendent
Roseville City School District
1050 Main Street
Roseville, CA 95678

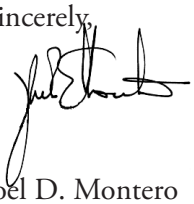
Dear Superintendent Pierucci,

In September 2013 the Roseville City School District and the Fiscal Crisis and Management Assistance Team (FCMAT) entered into an agreement to provide a review of the district's technology support services. Specifically, the agreement stated that FCMAT would perform the following:

1. Ensure that technology is effectively integrated into the schools. The team will review the existing board policies, administrative regulations, equipment replacement and technology master plans. The evaluation will include the district's plan for using technology to support education reform through the acquisition of new hardware.
2. Review the innovative technologies emerging and make recommendations to standardize the technology hardware purchased by the district. Evaluate procurement to determine whether performance and reliability levels are maximized for achieving student learning instead of continuing to purchase specific brands.
3. Review current hardware standards and specifications to minimize the risks of the type of technology purchased. Purchasing hardware carries inherent risks. The team will analyze procurement planning at the district and site levels to identify the risks of implementing new hardware purchases. This will include reviewing the workflow and experience of the district's technical expertise to implement new and emerging technologies.

This final report contains the study team's findings and recommendations in the above areas of review. FCMAT appreciates the opportunity to serve the Roseville City School District, and extends thanks to all the staff for their assistance during fieldwork.

Sincerely,



Joel D. Montero
Chief Executive Officer

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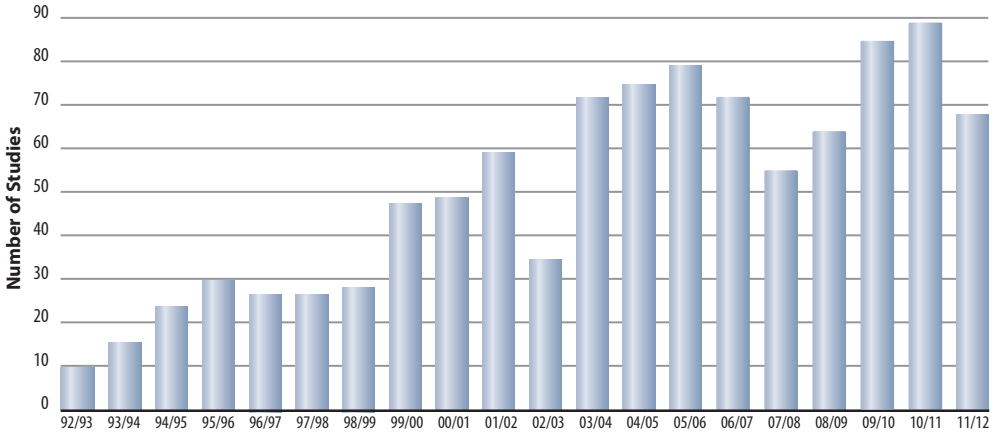
About FCMAT

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.

Studies by Fiscal Year



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 offices 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 at the base of the Sierra Nevada mountains, Roseville lies approximately 20 miles northeast of Sacramento and has a population of approximately 126,000. The Roseville City School District is the seventh largest employer in the city, with approximately 929 positions.

The district serves 10,070 students at 14 elementary schools and four middle schools. Current academic goals for the district include focusing on delivery of effective first instruction, implementing the Common Core Standards and assessment framework, developing Common Core grading and reporting systems, and expanding instructional leadership capacity.

Study Guidelines

In September 2013 the Roseville City School District requested FCMAT to review the district's technology support services. FCMAT visited the district on October 22-23 to conduct interviews, collect data and review documents. This report is the result of those activities and is divided into the following sections:

- Executive Summary
- Findings and Recommendations
- Information Technology Staffing and Structure
- Educational Technology – Vision and Leadership
- Access to Student Data
- Procurement and Standards
- Common Core Support and CAASPP Readiness
- Technology Asset Inventory
- Reorganization
- Appendices

In writing its reports, FCMAT uses the Associated Press Stylebook, a comprehensive guide to usage and accepted style that emphasizes conciseness and clarity. In addition, this guide emphasizes plan language, discourages the use of jargon and capitalizes relatively few terms.

Study Team

The study team was composed of the following members:

Scott Sexsmith
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San Jose, CA

*As members of this study team, these consultants were not representing their respective employers but were working solely as independent contractors for FCMAT. Each team member reviewed the draft report to confirm accuracy and achieve consensus on the final recommendations.

Executive Summary

Educational Technology – Vision and Leadership

The district lacks an active technology committee to guide the acquisition, deployment, and integration of technology, and technology planning is inadequate.

A director of educational technology position could coordinate the selection, implementation and support of educational technology and build the district's capacity to support technology integration into daily instruction, Common Core and California Assessment of Student Performance and Progress (CAASPP) implementations. This position could work closely with the IT department to align goals and objectives to the district's Common Core implementation plan.

An additional teacher on special assignment position could facilitate professional development that focuses on integrating technology into instruction.

Access to Student Data

The district uses Global Scholar (now Scantron) and Q (formerly Zangle) as the data management and student information system. Global Scholar houses student grades while Q houses enrollment and student demographic data. These two disparate systems are not integrated, resulting in problems with producing accurate and timely reports for district staff.

To address these problems the district should re-evaluate its use of two systems versus a comprehensive system and implement role-based security settings to provide timely and correct access to data in the student information system.

Procurement and Standards

The district has recently enacted technology purchasing procedures to more closely link purchases to specific goals or objectives. However, some staff are unaware of the new procedures. The IT department created technology standards without adequate input from administrators and teachers. The district lacks a clear vision of technology goals for the classroom, which results in difficulty with site-based technology purchases.

Common Core Support and CAASPP Readiness

The IT Department and education services division are not coordinating well on a coherent strategy to integrate the Common Core implementation and technology.

The lack of a district coordinated Common Core State Standards (CCSS) technology plan shifts the burden to sites and teachers to discover where the technology is embedded in the CCSS and to develop grade level and site plans to address how these standards will be met. This is leading to divergent site plans and requests for devices, applications, and programs that may not align with the IT department's ability to provide support.

Nine of the 18 computer labs surveyed by the IT Department are listed as "not likely" to be ready for administering online assessments in 2015. The department is not adequately staffed to support districtwide implementation of online assessments in the necessary learning environment for Common Core implementation. Given the growth the district has experienced and the ongoing and increasing reliance on technology, the department does not have sufficient resources to meet existing service and support requirements, let alone the requirements of online assessments.

To adequately prepare for the upcoming online testing the district should develop a comprehensive California Assessment of Student Performance and Progress (CAASPP) assessment plan that addresses the March 2014 field trials and the full 2014-15 test implementations, and a framework for collaboration between the educational services division and the IT department.

Certificated Professional Development

The district provides limited professional development for teachers primarily through the teacher on special assignment in the educational services division. Staff throughout the district lack understanding of how professional development for learning technologies is communicated, executed, and evaluated. Teachers are often handed a device with the instruction to use it and to determine what the device is capable of doing.

Documentation reviewed as well as interviews with staff at all levels identified concerns with how well teachers are trained and prepared for implementing Google Apps for Education as an instructional tool to support Common Core State Standards as well as the CAASPP assessments.

The district should administer the Common Core Technology Skills Self-Assessment for each teacher and administrator and then devise and implement a professional development plan for implementing each of the learning technologies used in the district. This plan should ensure that teachers and support staff have the necessary training to implement the technology components contained embedded in the Common Core State Standards.

Devices and Infrastructure

Teacher access to technology varies between school sites. While the district provides each teacher with a desktop computer or laptop, funding sources for additional classroom technology such as document cameras, projectors, wireless access points and student computers are determined by the school sites. This has led to different levels of technology access for students at school sites. With the requirement for all 3rd-8th graders to be tested on computers in March 2014 and beyond, technology purchasing and planning cannot be left solely to individual school sites.

With the district's heavy reliance on cloud-based services, sufficient Internet bandwidth is of concern. The district's 100Mb Internet connection may not be sufficient to support CAASPP assessments and normal Internet use. The district is planning for bandwidth upgrades early next year.

The wireless network access points utilize the wired network for Internet connectivity. The district's wired network infrastructure is aging and many critical devices need to be replaced. The district has no budget for regular replacement of core infrastructure.

The district should develop a strategic plan that provides equitable access to technology for all students and establishes minimum student-to-computer ratios for each school. Additional bandwidth may be needed to support CAASPP. The district should develop a wireless implementation plan and a replacement plan and budget for refreshing critical infrastructure regularly to ensure network reliability.

Technology Asset Inventory

The IT Department tracks technology assets using software tools and physical logbooks located in Purchasing. It is unable to produce a complete current and accurate inventory of all technology assets.

An asset tracking system for technology devices could provide data for CAASPP technology readiness assessments and other technology management purposes.

Information Technology Staffing and Structure

The Information Technology (IT) department's priorities and resources do not align well with the district's educational goals. The number of technicians to support the growing amount of technology on the campuses is insufficient to meet the support requests and will not be adequate to support the implementation of both Common Core and the related online student testing. The student database coordinator position often is unable to respond in a timely manner to requests for data. Given the importance of this data with regard to the Local Control Funding Formula, Local Control Accountability Plans, and California Longitudinal Pupil Achievement Data System (CALPADS), a position of student information systems data specialist could assist and provide additional support.

Reorganization

Restructuring should include the addition of a technical services manager, a student information systems data specialist, and two additional information systems technicians. To focus on successful integration of technology in the classroom the district should also add a director of educational technology and a teacher on special assignment to the education services division.

Findings and Recommendations

Information Technology Staffing Overview

The Information Technology (IT) Department is led by the director of technology who reports directly to the superintendent. An additional 6.5 FTE positions in the department provide technical support to the district office and school sites. The department has not added any staff since 2007. Staffing is discussed in detail beginning on page 21.

Educational Technology - Vision and Leadership

The district's technology plan states the vision and purpose for technology in Roseville City Schools: "Technology will be utilized to engage students in the learning process to provide enhancement and extension within the curriculum. Educators will utilize technology as an integral part of teaching, working and learning process to maintaining and improving the quality of education." It goes on to state, "... every student must have the opportunity to learn to manage information, solve problems, and use emergent technologies." The technology plan also outlines general curricular goals to be achieved through technology use.

Despite the vision stated in the technology plan, the district has no clear, shared vision for learning technologies. Each school has either formally or informally defined its own plan for technology integration, sometimes in conflict with IT Department policies. The absence of a districtwide vision has accelerated the practice of each school site acquiring its own technology. This has resulted in a disparity of student access to newer instructional technology among school sites, as the following table illustrates.

School	Students per Computer
Barbara Chilton Middle	3.5
Blue Oaks Elementary	25.8
Bradford Woodbridge Fundamental Elementary	3.8
Catheryn Gates Elementary	18.8
Crestmont Elementary	22.1
Diamond Creek Elementary	17.9
Ferris Spanger Elementary	22.8
George A. Buljan Middle	5.7
George Cirby Elementary	19.6
George Sargeant Elementary	21.5
Junction Elementary	29.6
Robert C. Cooley Middle	19
Sierra Gardens Elementary	20.1
Stoneridge Elementary	8.9
Thomas Jefferson Elementary	23.1
Vencil Brown Elementary	8.2
Warren T. Eich Middle	22.4
William Kaseberg Elementary	17

Data from 2012-13 CBEDS report available at http://www.ed-data.k12.ca.us

Table represents lab computers four years old or newer.

The lack of a clear vision for learning technologies has also led to disjointed efforts and sometimes opposing or competing projects. This has resulted in wasted time and money, misallocation of human resources, and often stretched technology support personnel so thin that mission critical systems suffered. Less than successful technology projects have served to demotivate teachers and staff and have led staff to implement work-around solutions that are counterproductive to overall district interests.

Interviews with staff revealed consistent agreement that there is not one clear vision for learning technologies. School sites use whatever technology devices staff members are comfortable with or have learned about in workshops. Some schools have students using iPads and Apple TV in the classroom, and others have laptop carts. Some schools limit student access to computers in a lab environment, other schools are implementing Chromebooks, and one school is completely PC-based.

School sites have been granted much latitude to devise technology implementation plans and purchase devices before a written plan to provide professional development and support is approved. This level of site autonomy has placed a large burden on the district technology department by requiring the technicians to develop expertise in multiple operating systems, multiple device characteristics, network configuration requirements, and troubleshooting protocols. When technicians are expected to respond to such a wide range of possibilities, they must spend extra time researching issues, which can divert their attention from other essential systems such as the network, email, and student information and business systems.

The team found that staff lack confidence in the technology department largely because of past projects that were partially implemented, implemented but not supported, or failed altogether. The most notable example cited is the implementation of the Global Scholar program, which has been in the "launch" phase for several years and had dedicated personnel assigned to a post-launch rollout. Because of the delay in getting the system ready for rollout, employees have had to be reassigned to other projects that are ready. Teachers have been forced to find workaround solutions to the needs that Global Scholar was meant to address. District technology staff must then troubleshoot these workarounds, such as grade book programs.

The district technology plan references several committees such as the technology committee and the 21st Century Learning Committee. The district's website states that these committees convene to: "1. Review the District's Technology Plan. 2. Explore & plan how to use YouTube, Google Apps & mobile devices for student learning. 3. Explore new teaching & assessment strategies using technology tools to become more productive & efficient in our jobs."

Despite the stated purpose, the review team found that the functions of these individual committees are not clear, and periodic reviews of the technology plan are not occurring. Successful school district technology programs regularly convene a diverse technology advisory committee to create a vision of learning technologies for all students and a comprehensive plan to attain that vision. The technology advisory committee then regularly monitors and adjusts the plan to meet changing needs and acts as a vehicle for two-way communication between the school sites and the district IT department.

The director of technology is responsible for coordinating educational technology services such as classroom hardware and software selection, implementation, and the delivery of appropriate professional development to support the hardware and software. A teacher on special assignment (TOSA) reports to the assistant superintendent of education services, although that position primarily focuses on supporting the assessment system.

When asked who was responsible for providing educational technology leadership and training in the district, several staff stated that they felt it was the director of technology's responsibility, but this response was not universal. FCMAT could not identify a clear and defined educational technology strategy or establish a clear consensus among the interviewees regarding responsibility for educational technology. The Common Core State Standards (CCSS) have embedded technology throughout the curriculum and the Fresno County Office of Education has identified specific technology skills required for students in the CCSS - http://commoncore.fcoe.org/subject/technology. Districts must start building capacity for technology use in the classroom to support CCSS. Educational technology leadership and appropriate professional development are essential elements to successful technology implementations.

A director of educational technology position could coordinate the selection, implementation and support of educational technology throughout the district and increase the district's professional development capacity to support technology integration into daily instruction, Common Core and CAASPP implementations. This position should report to the assistant superintendent of education services and work closely with the IT department to align goals and objectives to the district's Common Core implementation plan.

An additional TOSA position could provide professional development for integrating technology into instruction. This TOSA would report to the newly created director of educational technology position and work closely with education services and the existing TOSA.

Recommendations

The district should:

1. Reconvene the technology committee and 21st Century Learning Committee to review and gather input from all stakeholders regarding the vision for technology, and revise the vision if necessary.
2. Adjust and update the technology plan as necessary to achieve the vision.
3. Formalize and implement a process to continuously monitor the technology plan and report progress to the superintendent and board.
4. Create and implement a plan to transition most funding for technology devices and programs from individual schools to district-level budgets. In the plan, address and remediate the disparity of student access to technology between schools.
5. Develop a professional development plan for training all IT support staff on new and existing operating systems and hardware.
6. Create a director of educational technology position
7. Create a teacher on special assignment (TOSA) position to work with Common Core implementation.

Access to Student Data

District schools have implemented professional learning communities (PLCs) to closely monitor student progress so that students get necessary interventions as soon as possible. The most essential tool for effective PLCs is current and relevant data. Principals and teachers do not have quick access to the student data necessary for effective PLCs.

The district uses Global Scholar (now Scantron) and Q (formerly Zangle) as the data management and student information system. Global Scholar houses student grades and Q houses enrollment and student demographic data. These two systems are not integrated. Implementation of the systems has been ongoing, with no date set for full implementation and integration. A teacher who needs student assessment information must submit a service ticket outlining what data elements are necessary and for which students. The student database coordinator receives the ticket, queries each system separately, and exports the data into File Maker Pro. Once the data is in File Maker Pro, the data is manipulated so that a report can be formatted, executed and saved. The report is then delivered to the teacher. The district has only one position with technical knowledgeable of both systems, so all reports are dependent on one employee. This labor-intensive process is also expensive and prone to errors.

Best practice for school districts is to have one integrated system for student data, including assessment and progress data, with training provided so that teachers know how to access standard reports, customize reports, and analyze the data. Principals should be able to monitor individual student progress and prepare reports for presentations. School districts implementing new data systems often provide teachers, site administrators, and district-level administrators with customizable data dashboards that graphically display the most current data at a glance. Districts implementing best practices also provide portals for parents to access a wide range of information, from homework assignments and current grades to important announcements.

Recommendation

The district should:

1. Evaluate the current data systems versus the purchase of a comprehensive system. Include the cost-benefit analysis of each option as well as a five-year total cost of ownership analysis.

Procurement and Standards

The district has implemented a new procurement procedure to address issues related to technology purchasing. Previously, technology purchasing was not tied to specific instructional goals or objectives. Under the new process, school principals must link their technology requests to a site goal or objective. However, the district does not have a clear vision for technology goals in the classroom or which devices support those goals. This will make it difficult for principals to align their local technology purchases.

Components of the technology purchasing process that are essential to a successful implementation include:

- A series of reviews for clear objectives for learning outcomes
- The ability to support the technology in the setup and over the long term
- Sufficient professional development as part of the purchase
- A plan to address the planned obsolescence and replacement of the technology.

Some staff interviewed were aware of the new purchasing procedure while others were not. The district should ensure that the new purchasing procedure for technology is clearly communicated to all stakeholders so that technology purchases are aligned to learning objectives and the district vision.

The IT Department has published a set of hardware and software standards. These standards were created without input from stakeholders (administrators, teachers, students, parents) and as a result, may or may not be sufficient to meet students' learning needs. During the interview process it became clear that there is some confusion as to whether or not the district will use iPads or Chromebooks, Apple or Microsoft. A clear direction for technology needs to be established so that principals know what equipment to order, technicians can support the equipment, and teachers know how to integrate the technology into their daily instruction.

Recommendations

The district should:

1. Ensure that the new purchasing procedure for technology is clearly communicated to all stakeholders.
2. Establish a set of technology standards with clear learning objectives attached to devices through a committee process, with input from all stakeholders.

Common Core Support and CAASPP Readiness

A coherent strategy is necessary to integrate the district's Common Core implementation with technology. While the IT department and the Educational Services Division are willing to collaborate more closely on the CCSS implementation and associated assessments, effective communication and planning has been minimal.

The IT Department has presented a plan and budget proposal for preparing for the CAASPP field trials. However, general concern was expressed during interviews as to the plan's ability to prepare the district to test all students on computers in March 2014. The plan was prepared without input from key stakeholders, including site principals, teachers and Education Services. The district does not appear to be properly prepared to administer the CAASPP field trials in March 2014 or the full assessments in 2014-15.

The lack of a district-coordinated CCSS technology plan has shifted the burden to sites and teachers to discover where the technology standards are embedded in the CCSS, and then develop grade level and site plans to meet the standards. This has led to divergent site plans and requests for devices, applications, and programs that the IT department may not be able to support. When individual schools take responsibility for acquiring devices and programs, the district loses the ability to leverage economies of scale, and the work to acquire these tools is duplicated at each school.

CAASPP released the Technology Readiness Tool and the Technology Readiness Calculator to help districts calculate the number of computers and associated system requirements needed to successfully administer the tests in a given testing window. Assessment schedules, testing windows, device accessibility and readiness all need to be considered in developing a CAASPP implementation plan. If many devices need to be purchased, purchasing and warehouse need to be included to assess the impact of ordering and processing large volumes of equipment. Considerations for bid limits and RFP lead times may also have to be considered. The district should bring all stakeholders together to develop a comprehensive CAASPP assessment plan to prepare for the field trials in March 2014 and implementation of the assessments in 2014-15.

Nine of the 18 computer labs surveyed by the IT Department are listed as not likely to be ready for administering online assessments in 2015. Purchasing the technology to administer the assessments will be expensive. The district must ensure that these resources are properly managed and that status information can be related to all concerned stakeholders in a timely manner. Software such as Microsoft Project can fully manage the department's current and upcoming projects.

The IT department is not adequately staffed for districtwide implementation of the CAASPP online assessments or for the Common Core implementation. Given the district's growth and the increasing reliance on and demands of technology, the department does not have enough resources to meet existing service and support requirements, let alone these additional requirements.

Recommendations

The district should:

1. Develop a comprehensive CAASPP assessment plan that addresses the March 2014 field trials and the 2014-15 testing implementation.
2. Develop a framework for collaboration between the educational services division and the IT department that addresses meeting frequency, a process for agenda planning, a method for publicizing action items, a communication plan, and an evaluation method to measure the effectiveness of collaboration.

Certificated Professional Development

Teachers receive limited professional development primarily through the TOSA in the Educational Services Division. Staff districtwide lack understanding about how professional development for learning technologies is communicated, executed, and evaluated.

The TOSA for technology was originally created to help teachers implement Global Scholar. Due to the prolonged implementation process for Global Scholar, the TOSA role gradually transitioned to helping teachers implement learning technologies, plan for CCSS implementation, and use the new grade book. This has led to confusion of roles between Educational Services and the IT Department.

Teachers are often handed a device with the instruction to use it and determine its capabilities. Site technology teacher leaders, or single points of contact (SPOCs), meet regularly with the technology director, but professional development is not a part of those meetings. SPOCs are widely considered site learning technology experts, but receive no formal, ongoing professional development or coaching.

The district recently adopted Google Apps for Education (GAFE), a suite of no-cost tools and programs for email, calendars, and documents. The professional development for instructional implementation of GAFE is minimal. Documentation reviewed as well as interviews with staff at all levels revealed concern regarding how well teachers are prepared to implement it as an instructional tool to support CCSS and the CAASPP assessments.

Districts that have successfully implemented learning technologies, including GAFE, have a well-thought-out and professional development plan for initial implementation as well as sustained coaching and training of new staff. An academic technology specialist delivers professional development, often as a member of the IT department. If the academic technology specialist is based in another department, professional development sessions are presented jointly with an IT department staff member.

Successful districts present technology in the context of desired learning outcomes; i.e., the focus is not on the technology itself, but on the content area and standards to be mastered with the technology.

Districts where technology is effectively integrated into classrooms have mutual trust and collaboration between the IT department and the educational services division. They monitor results of pilot programs, share relevant data, track and share learning and insights from site professional learning communities (PLC), and put systems in place to share information between school sites, and between schools and the district office.

Recommendations

The district should:

1. Implement an organizational structure that provides increased resources and focus on learning technology.
2. Administer the Common Core Technology Skills Self-Assessment for each teacher and administrator. The self-assessment can be accessed at: http://goo.gl/vyNE40
3. Based on the results of the self-assessment, devise and implement a professional development plan for implementing each of the district's learning technologies, with the focus on student learning outcomes.
4. Provide training to the single points of contact to increase their expertise as site-based trainers.

5. Review the documents developed by Fresno County Office of Education titled ELA Common Core Standards with Technology (http://commoncore.fcoe.org/sites/commoncore.fcoe.org/files/resources/SPIRAL%20FINAL.pdf), and Technology Skills Matrix for Students K-12 (http://commoncore.fcoe.org/sites/commoncore.fcoe.org/files/resources/FCOE_TechSkills_Flowchart_2012.pdf). Customize the documents as necessary, and develop an implementation plan for teachers and support staff.

6. Develop a professional development plan based on the documents noted above that ensures teachers and support staff are trained to implement the technology components embedded in the Common Core State Standards.

Devices and Infrastructure

Teacher access to technology varies between school sites. While the district provides each teacher with a desktop computer or laptop, additional classroom technology such as document cameras, projectors, wireless access points and student computers is partially funded by the school sites. All new schools, when built, open with this technology already in place. Computer labs were initially provided by the district but have since become the responsibility of schools and parent teacher councils to allocate funds to update or replace. This has led to different levels of technology access for students. With the requirement for all 3rd-8th graders to be tested on computers in March 2014 and beyond, the district can no longer make the decision to leave technology purchasing and planning solely to individual schools.

In the Technology Strategy Framework document released on 2-6-13 (http://www.smarterbalanced.org/wordpress/wp-content/uploads/2011/12/Technology-Strategy-Framework_2-6-13.pdf), the SBAC states, "... all districts interviewed operated with an 8:1 to 11:1 student-to-computer ratio and were able to manage processing all students in a three-to-four-week assessment window."

This ratio should be considered a minimum goal to support administering the CAASPP online assessments in the future. Other key points in the document included:

1. Plan to migrate from Windows XP to newer OS within two years of Microsoft's support end date of April 2014.

2. Upgrade computers to at least 1 GB of internal memory.

3. Ensure that devices have a visual display of no less than 9.5-inch screen dimension (10-inch class) supporting at least 1024x768 resolution.

4. Operate the student testing site on secure browsers.

5. The assessment currently uses approximately 5 to 10 KBPS of bandwidth per student.

CDE Resources for CAASPP - http://www.smarterbalanced.org/wordpress/wp-content/uploads/2011/12/Tech_Framework_Device_Requirements_11-1-13.pdf

Successful districts have developed a strategic plan to provide equitable access to technology for all students and establish minimum student-to-computer ratios for each school for administering the CAASPP assessment. The plan also addresses sustainability, affordability, support staffing and training for both teacher and student technology and includes input from all stakeholders. It also

promotes student "screen time," or time spent using a computer as part of daily instruction, to properly prepare students for taking a computer-based online assessment.

With the district's heavy reliance on cloud-based services, sufficient Internet bandwidth is of concern. The district's 100Mb Internet connection may not be sufficient to support both CAASPP assessments and normal Internet use. The current bandwidth recommendation is 1Mbps for every 100 students testing. The district should use the tools provided by the SBAC to assess the district's readiness for online testing and determine if additional bandwidth will be needed. The tools can be found online at http://www.smarterbalanced.org/smarter-balanced-assessments/technology/

Low cost mobile devices such as Chromebooks and iPads (which are being adopted by schools statewide in preparation for the CAASPP assessments) require robust wireless infrastructure if they are to be reliable testing platforms. The district should plan for a districtwide wireless implementation that addresses both coverage (the ability to roam a campus and remain connected to the wireless network) and density (the ability to support the simultaneous use of class sets of devices in close proximity). The standard many districts are now working toward is one access point per classroom.

The wireless network access points utilize the wired network for Internet connectivity. The district's wired network infrastructure is aging, and many critical devices need to be replaced. With online testing and technology integrated classroom instruction, the network becomes even more essential. Cloud-based services rely on access to the Internet to function. A Chromebook without Internet access is of little use to a student in the classroom.

Recommendations

The district should:

1. Develop a strategic plan that provides students with equitable access to technology, establishes minimum student to computer ratios for each school, and promotes "screen time" to properly prepare students for taking a computer based online assessment.
2. Assess if additional bandwidth will be needed to support CAASPP.
3. Develop a wireless implementation plan that addresses both coverage and density to support all devices.
4. Establish a replacement plan for regularly refreshing critical infrastructure to ensure network reliability.

Technology Asset Inventory

The IT Department tracks technology assets using a combination of software tools such as Air Watch Mobile Device Management, Apple Remote Desktop, and LANDESK Management Suite. There are also physical inventory logbooks located in the Purchasing department. It is unable to produce a complete current and accurate inventory of all technology assets.

The Escape system used by the district for comprehensive financial management includes an asset management module, but it is not being used.

The district will need a system to accurately assess technology readiness and system requirements for the CAASPP assessments. As technology requirements are updated and equipment falls out of warranty, the IT Department and school sites will need a way to produce reports to inform equipment replacement and technology purchasing decisions.

Recommendations

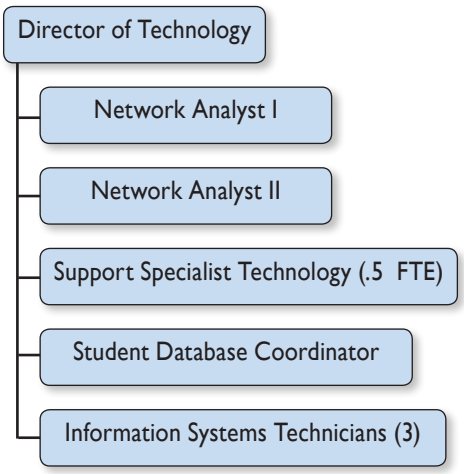
The district should:

1. Implement an asset tracking system for technology devices that provides data for CAASPP technology readiness assessments and other technology management purposes.

Information Technology Staffing and Structure

The director of technology leads the information technology (IT) Department. The following chart shows the IT Department organizational structure.

Current District Organizational Structure



The IT Department consists of a director of technology, a network analyst I, a network analyst II, a student database coordinator, three information systems technicians and one 4-hour, .5 FTE support specialist technology position. All positions report to the director. Both network analyst positions are classified management, but no positions report to them. The department supports 18 school sites and the district office and last added staff in 2007, consisting of a network analyst I and the third information systems technician.

Departmental responsibilities are separated across functional areas. Each network analyst is responsible for different aspects of district systems and services. For example, the network analyst II maintains the phone system, while the network analyst I supports the Microsoft Windows desktop systems. The areas of responsibility covered by both network analysts are critical to district operations; however, the district has not cross-trained the two positions. Cross training should be a priority. Adequate backup coverage for all systems will ensure continuity of operations. Professional development plans for these types of positions can facilitate training on district systems and provide learning opportunities in current and emerging technologies.

Information systems technicians are responsible for their assigned sites. Technicians coordinate installations, maintenance, and troubleshooting at their own sites but do not generally provide support to other sites. The technicians manage and prioritize their own tasks, ticket queues and schedules. Two of the technicians are assigned six sites while the third is assigned five. Buljan Middle School, which runs the Microsoft Windows operating system on its computers, is also assigned to the network analyst I because the technicians have not been trained on Windows. Site staff expressed some frustration with the lack of time site technicians are available to spend at their sites.

One way to improve site technician response times is to have staff actively manage the ticket queue utilizing a problem-based response workflow, with technicians providing support across

all sites. However, the growth in technology implementation across the district has outpaced the needed support. FCMAT's proposed organizational chart adds two information systems technician I positions, for a total of five.

The information systems technicians' skill sets are focused on the Apple operating system, and the district has no plan to train staff to support the other platforms in use. The district has introduced iPads and Chromebooks, and the support staff are learning these new systems on their own. While self-directed learning is part of every technology support person's responsibility, it should be reinforced and supported with regular formal training. The district should develop a professional development plan for training IT support staff on new equipment and on existing operating systems and hardware.

The student database coordinator is responsible for all support for the student information system (SIS) and California Longitudinal Pupil Achievement Data System (CALPADS). As the California Measurement of Academic Performance and Progress (CAASPP) assessment system testing is implemented, accurate and timely data reporting will become increasingly critical due to the importance of that data to the Local Control Funding Formula (LCFF) and the related accountability through the Local Control Accountability Plan (LCAP).

With increases in reporting requirements, CALPADS data management is a full time responsibility for a district of Roseville's size. With a single position responsible for both SIS support and all CALPADS data, the timeliness and accuracy of district data reporting is vulnerable to prolonged illness or staff turnover. It also has become a bottleneck to accessing data. The district should create a student information specialist position to distribute support and data requests across two positions, thereby improving access to information and ensuring continuity of data reporting.

The .5 FTE support specialist technology position provides clerical support to the department, including managing device inventory, providing technology quotes to sites and processing department purchase orders. This position also provides basic help desk support and manages adds/moves/changes for district email accounts. With an expected increase in technology ordering and devices to support CAASPP and Common Core instruction, the position will not have enough time to deliver proper support to school sites for technology ordering, inventory tracking and help desk support.

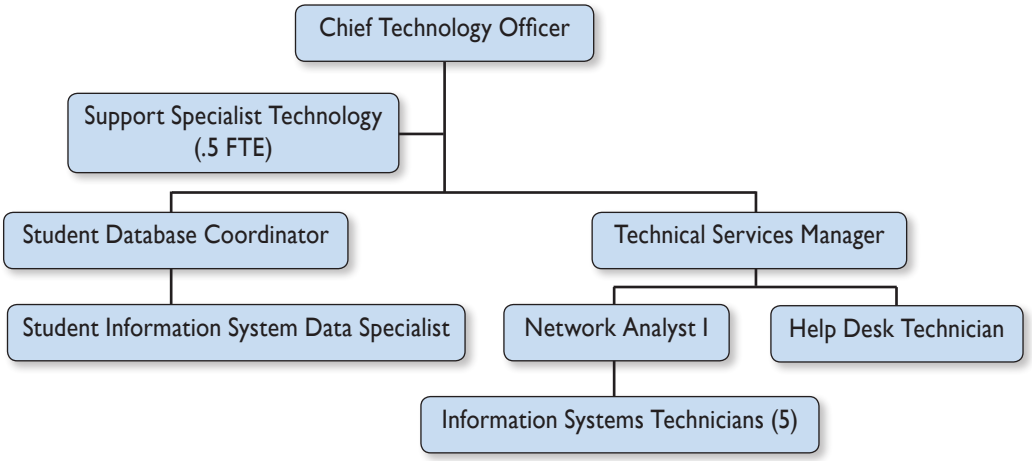
A lack of access to support was mentioned throughout FCMAT's interviews. District users generally expressed frustration with the process for communicating support requests to the IT Department. The district utilizes single points of contact at each site and in each department as the first line of support for technology issues. The level of support provided varies by site. However, interviews indicate that the primary role of the contact is to route help desk tickets to the IT Department. A dedicated help desk position would provide consistent and timely support to users for the issues that can be quickly addressed remotely rather than being processed through the ticket queue and assigned to an information systems technician.

The director of technology reports to the superintendent. Most of the director's responsibilities revolve around department operations as opposed to strategic planning, communication and collaboration with school sites and other departments. The director has seven direct reports, which focuses his attention on operational tasks as opposed to strategic planning and communication. A cabinet-level chief technology officer (CTO) position could better focus on the strategic alignment of technology to the district's instructional goals. The CTO would report directly to the superintendent and would regularly attend meetings that affect all branches of the organization.

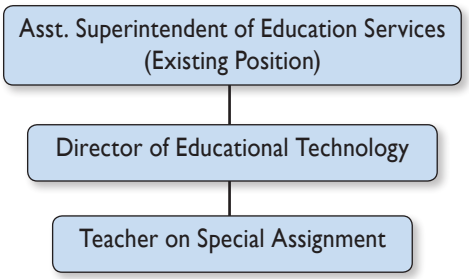
The department would be better served by a technical services manager position to address its operational functions. This could be accomplished by eliminating the network analyst II position. The information systems technicians, network analyst I, and the help desk would report to the technical services manager.

Reorganization

The following diagram shows FCMAT's proposed reorganization of the IT department.



The following diagram shows the two additional staff recommended for the Educational Services division.



The table below shows current titles and any proposed title changes for IT Department positions.

Current Title	Proposed Title/Change
Director of Technology	Reclassified as a Chief Technology Officer
Network Analyst I	No Change
Network Analyst II	Position Eliminated, $70,000 savings
Support Specialist Technology (.5 FTE)	No Change
Student Database Coordinator	No Change
Information Systems Technicians (3)	No Change to title, 2 positions added

The following table lists proposed new IT and Educational Services positions and the estimated salary for each. This does not include the costs for statutory and health and welfare benefits.

Additional Positions	Department	Estimated Annual Salaries
Technical Services Manager	IT	$80,000 (Classified Management salary schedule "F")
Help Desk Technician	IT	$40,500 (Classified Salary Schedule Range 35)
Information Systems Technicians (2)	IT	$80,000 ($40,000 each)
Student Information System Data Specialist	IT	$39,000 (Classified Salary Schedule Range 33)
Director of Educational Technology	Ed. Services	$91,500 (Certificated Management Salary Schedule "VI")
Teacher on Special Assignment	Ed. Services	$72,500 (Certificated Management Salary Schedule "II")

The transition to the proposed organizational structure can be accomplished by a combination of attrition, reclassification, redefining roles and job descriptions, and/or other means. Changes in positions, titles and salaries may be subject to negotiation and collective bargaining. The proposed reorganized department contains several new position titles, and representative duties and responsibilities are briefly described below. Sample job descriptions for these positions are included in Appendix B.

New/Reclassified Position Descriptions

Following is a brief summary of the responsibilities of the recommended new positions.

Chief Technology Officer

Provides vision, oversight, and allocation of resources to support the district's strategic goals and objectives. Collaborates with other district leaders to maximize the efficient and effective use of academic and administrative technology, works closely with district leaders to develop timelines and milestones for critical projects, and provides regular status updates to all stakeholders.

Technical Services Manager

Coordinates services and is responsible for the desktop support staff. Serves as a single point of contact for end users to resolve technical support issues. Plans for upgrades and support of computers and associated equipment. Coordinates with the Educational Services Division to ensure that classrooms receive adequate support in a timely manner.

Implements and supports networks and build-outs including VoIP, wireless, video and other communication/collaboration related technologies. Evaluates, designs, implements and maintains the network infrastructure for the entire district.

Help Desk Technician

Responsible for the district's help desks and serves as a technical resource to employees. Logs all service requests received over the phone or through e-mail into the district's help desk service call tracking system. Assists customers with tier 1 troubleshooting and resolution of software and hardware problems over the phone and through the use of remote control software. Assigns calls to field personnel as needed for cases requiring on-site support, performs advanced diagnostic testing and repair or direct vendor assistance; assists walk-in customers at primary work location. Performs imaging and other software installations on computers physically at the service desk as time allows.

Student Information System Data Specialist

Working with the student database coordinator, is responsible for maintenance and support of the district's student information system and all related software. Works directly with school and district staff regarding the enrollment, attendance, scheduling, grading, and assessment reporting and processes. Responsible for all state reporting requirements such as CALPADS and other outside agency exports and imports.

Director of Educational Technology

Provides leadership and guidance in the implementation of districtwide educational technology, and provides and directs technical assistance and support to schools in a variety of computer programs and functions. Plans, organizes, recommends and directs districtwide training, hardware and software adoptions and implementation. Contributes to leadership and direction in technology planning, assessment programs, equipment acquisition, applications development, and establishment of standards for hardware and software. Coordinates with principals and teachers on assignment to implement goals and integrate technology into instruction.

Teacher on Special Assignment

Supports and guides technology curriculum development and integration, teacher development and instructional program design to enhance student achievement. Works to improve the overall quality of education received by students and teachers and acts as an advocate for promoting successful techniques in integrating technology into the curriculum.

Working with the director of educational technology, conducts long and short range planning for curriculum technology integration. Acts as a liaison for the Educational Services division and the IT Department.

Recommendations

The district should:

1. Restructure the IT Department to enable it to better provide site support and to address the department's operational and management issues.
2. Reclassify the director of technology position as a chief technology officer position responsible for managing all district technology.
3. Add two information systems technicians to increase technology support to the sites.
4. Create a help desk technician position.
5. Eliminate the network analyst II position and create a technical services manager position.
6. Create a student information systems specialist position to assist with data reporting.
7. Add a director of educational technology and a teacher on special assignment.

Appendices

Appendix A - Study Agreement

Appendix B - Sample Job Descriptions

Appendix A

FCMAT
FISCAL CRISIS & MANAGEMENT ASSISTANCE TEAM
California School Information Services

FISCAL CRISIS & MANAGEMENT ASSISTANCE TEAM
STUDY AGREEMENT
May 6, 2013

The Fiscal Crisis and Management Assistance Team (FCMAT), hereinafter referred to as the team, and the Roseville City 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 assign professionals to study specific aspects of the Roseville City School District's 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 Assembly Bill 1200, 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 also 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:

The Roseville City School District is requesting the FCMAT team to review the technology department and make recommendations regarding best practices to ensure that the purchase of hardware strengthens existing curricula and supports meaningful, engaged learning for all students. The scope of work shall include the following:

1. Ensure that technology is effectively integrated into the schools. The team will review the existing board policies, administrative regulations, equipment replacement and technology master plans. The evaluation will include the district's plan for using technology to support education reform through the acquisition of new hardware.

2. Review the innovative technologies emerging and make recommendations to standardize the technology hardware purchased by the district. Evaluate procurement to determine whether performance and reliability levels are maximized for achieving student learning instead of continuing to purchase specific brands.

3. Review current hardware standards and specifications to minimize the risks of the type of technology purchased. Purchasing hardware carries inherent risks. The team will analyze procurement planning at the district and site levels to identify the risks of implementing new hardware purchases. This will include reviewing the workflow and experience of the district's technical expertise to implement new and emerging technologies.

B. Services and Products to be Provided

1. Orientation Meeting - The team will conduct an orientation session at the district to brief district management and supervisory personnel on the team's procedures and the purpose and schedule of the study.
2. On-site Review - The team will conduct an on-site review at the district office and at school sites if necessary.
3. 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.
4. Exit Letter – Approximately 10 days after the exit meeting, the team will issue an exit letter briefly summarizing significant findings and recommendations to date and memorializing the topics discussed in the exit meeting.
5. Draft Reports - Electronic copies of a preliminary draft report will be delivered to the district's administration for review and comment.
6. Final Report - Electronic copies of the final report will be delivered to the district's administration and to the county superintendent following completion of the review. Printed copies are available from FCMAT upon request.
7. Follow-Up Support – If requested, FCMAT will return to the district at no cost six months after completion of the study to assess the district's progress in implementing the recommendations included in the report. Progress in implementing 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. Andrea Alvarado	FCMAT Management Analyst
B. To be determined	FCMAT Consultant
C. To be determined	FCMAT Consultant

Other equally qualified staff or consultants will be substituted in the event one of the above 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 as follows:

A. $500 per day for each team member while on site, conducting fieldwork at other locations, preparing and presenting reports, or participating in meetings. The cost of independent consultants will be billed at the actual daily rate based on the provisions of Education Code section 84041.

B. All out-of-pocket expenses, including travel, meals and lodging.

C. 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 the district's acceptance of the final report.

Based on the elements noted in section 2 A, the total estimated cost of the study will be $10,000.

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

Payments for FCMAT's 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 during on-site reviews.

B. The district will provide the following if requested:

1. A map of the local area.
2. Existing policies, regulations and prior reports that address the study scope.
3. Current or proposed organizational charts.
4. Current and two prior years' audit reports.
5. Any documents requested on a supplemental list. Documents requested on the supplemental list should be provided to FCMAT only in electronic format; if only hard copies are available, they should be scanned by the district and sent to FCMAT in electronic format.
6. Documents should be provided in advance of fieldwork; any delay in the receipt of the requested documents may affect the start date of the project. Upon approval of the signed study agreement, access will be provided to FCMAT's online SharePoint document repository, where the district will upload all requested documents.

C. The district's administration will review a preliminary draft copy of the report resulting from 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 different phases of the study:

Orientation:	August/September, 2013
Staff Interviews:	to be determined
Exit Meeting:	to be determined
Preliminary Report Submitted:	to be determined
Final Report Submitted:	to be determined
Board Presentation:	to be determined, if requested
Follow-Up Support:	if requested

7. CONTACT PERSON

Name: Dennis Snelling, Assistant Superintendent, Business
Telephone: (916) 771-1600
Fax: (916) 771-1630
E-mail: dsnelling@rcsdk8.org

Richard Pierucci, Superintendent — Date
Roseville City School District

May 6, 2013
Anthony L. Bridges, CFE — Date
Deputy Executive Officer
Fiscal Crisis and Management Assistance Team

Appendix B

Irvine Unified School District

CHIEF TECHNOLOGY OFFICER

DEFINITION

Under the supervision of the Superintendent, the Chief Technology Officer provides dynamic, responsive, collaborative and forward-thinking vision, leadership and management of technology systems and services to support the mission and goals of the District. This includes the planning, development, implementation, management and maintenance of all applications, infrastructure, security, networks, technology training and communications, as well as comprehensive support for the teaching and learning activities of the staff and students.

ESSENTIAL DUTIES AND RESPONSIBILITIES

- Work collaboratively with schools and departments to support technology integration and innovation.
- Provides oversight and direction for integrated data communications networks and the use of integrated database management systems.
- Plans, schedules and directs the development of computer programs, including needs analysis, interface with other existing and planned programs, debugging, and development of comprehensive documentation.
- Identifies and supports instructional applications for technology.
- Designs and implements on-line quality assurance support programs including system and database security.
- Implements and evaluates systems and procedures to protect data integrity, reliability and accessibility.
- Organizes and coordinates appropriate staff development activities to ensure proper use of equipment and programs. Assures training is both operational and conceptual in scope.
- Develops functional specifications, standards and requirements for hardware and/or software purchase and design to ensure optimum system and end-user performance.
- Promotes participation of and collaboration with end-user and staff representatives in needs assessment, program development, service delivery efforts and project review.
- Evaluates technological changes, emerging technologies and best practices in computer and communication fields to recommend innovative and cost effective integration of new technologies.
- Manages operating budget covering all centralized computer support throughout the District and recommends prudent fiscal approaches for long-term hardware and software acquisition and maintenance.
- Coordinates staff development to support technology integration.
- Leads both short and long-range planning efforts related to technology.

- Coordinates the systems design work necessary to support the integration of information systems and platforms.
- Hires, supervises, develops and evaluates the work of assigned staff.
- Other duties as assigned.

QUALIFICATIONS GUIDE
Knowledge and Abilities:

- Ability to articulate and understand complex issues and facilitate effective problem-solving.
- Knowledge of principles, techniques, procedures and developments for the operation of data processing and communications technology.
- Understanding of technology integration in support of the instructional program.
- Knowledge of computerized educational management practices.
- Knowledge of complex computer systems design, analysis and operations, with a background in managing integrated database file structures.
- Ability to plan and direct a large, complex operation that involves coordination and integration of multiple interrelated activities.
- Knowledge and experience in system design, program development, debugging and system operation.
- Knowledge of operating systems and the integration of personal computers in information systems.
- Understanding of distributed processing.
- Ability to develop and maintain cooperative relationships with community members, certificated staff and classified staff.
- Knowledge of consensus building techniques and conflict resolution strategies.

Education and Experience:

- Master's Degree from an accredited college or university with major coursework or extensive experience in Technology, Educational Technology, Computer Science, Information Systems or Business Administration or a related field; Teaching or Administrative credential preferred; valid California driver's license.
- Preference for administrative experience, in a supervisory or management capacity, with educational technology, technology support and communications.
- Demonstrated record of strategic planning, budget management, integration and staff development.

REASONING ABILITY
Ability to apply common sense understanding to carry out instructions furnished in written, oral, or diagram form. The capacity to deal with and solve problems involving multiple variables.
PHYSICAL DEMANDS
The physical demands described here 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 functions.
While performing the duties of this job, the employee is regularly required to sit; walk; use hands and fingers, handle, or feel objects, tools, or controls; and talk or hear. The employee is occasionally required to stand, stoop, kneel, or crouch, and reach with hands and arms.
Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and the ability to adjust focus.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. While performing the duties of this job, the employee occasionally works near moving mechanical parts. The noise level in the work environment is usually moderate.

4/2010

Return to to

ELK GROVE UNIFIED SCHOOL DISTRICT

CLASS TITLE: CENTRALIZED TECHNICAL SERVICES MANAGER

BASIC FUNCTION:

Under the direction of the Director-Technology Services, organize and direct the day-to-day activities and operations of the Technology Services Department for the support of personal computer users and telecommunications network; coordinate activities for technical services for new school start ups, including computer network setup and telephone system startup; train and supervise the performance of assigned staff.

REPRESENTATIVE DUTIES:

Organize and direct the day-to-day activities and operations of the Technology Services Department for the support of personal computer users and telecommunications network.

Coordinate activities for technical services for new school start ups, including computer network setup and telephone system startup.

Train and supervise the performance of assigned staff; interview and select employees and recommend transfers, reassignment, termination and disciplinary actions.

Coordinate new sub-network connections, major moves of equipment and scheduled downtime for between Technical Services, Computer Operations, and the customer site.

Select and procure appropriate diagnostic and repair tools for technical services staff.

Establish and enforce network file server standard configurations, installation, monitoring, and testing procedures; establish server documentation formats and enforce documentation standards for District file servers connected to the Wide Area Network (WAN).

Assist Training Support Specialists during workload peaks or when difficult problems need additional help.

Coordinate with outside repair vendors for negotiating equipment maintenance contracts and problems that arise with existing contracts and/or time and material repairs.

Review and approve standard price lists for computer configurations and telephones.

Review, approve or reject purchase requisitions for computer software/equipment and telephone purchases by the District.

Provide periodic reports to management categorizing training and support activities.

Centralized Technical Services Manager - Continued **Page 2**

Establish training programs for staff members to maintain an adequate level of skills to keep up with constantly changing technology.

Establish and enforce procedures involving District telecommunications networks in a "standardized" supportable configuration including telephone system programming, cabling systems, network file servers, routers and hubs.

Create and maintain standards documents for networked microcomputers.

Prepare and maintain a variety of reports, records and files related to assigned activities and personnel.

Communicate with administrators, personnel and outside organizations to coordinate activities, resolve issues and conflicts and exchange information.

Operate a computer and assigned software programs; operate other office equipment as assigned.

Attend a variety of meetings as assigned.

Perform related duties as assigned.

KNOWLEDGE AND ABILITIES:

KNOWLEDGE OF:
Network topologies (LAN/WAN), networking components such as bridges, routers and hubs.
Oral and written communication skills.
Principles and practices of supervision and training.
Applicable laws, codes, regulations, policies and procedures.
Interpersonal skills using tact, patience and courtesy.
Operation of a computer and assigned software.

ABILITY TO:
Organize and direct the day-to-day activities and operations of the Technology Services Department for the support of personal computer users and telecommunications network.
Install and configure various software applications on Local Area Networks (LANs) and microcomputers.
Make routine equipment adjustments and perform routine maintenance.
Provide technical assistance to computer systems users.
Provide technical guidance and recommendations concerning existing computer programs and systems.
Train and supervise the performance of assigned staff.
Communicate effectively both orally and in writing.
Interpret, apply and explain rules, regulations, policies and procedures.
Establish and maintain cooperative and effective working relationships with others.
Operate a computer and assigned office equipment.

Centralized Technical Services Manager - Continued **Page 3**

Analyze situations accurately and adopt an effective course of action.
Meet schedules and time lines.
Work independently with little direction.
Plan and organize work.
Prepare records and reports related to assigned activities.
Maintain consistent, punctual and regular attendance.
Hear and speak to exchange information.
Move hands and fingers to operate a computer keyboard.

EDUCATION AND EXPERIENCE:

Any combination equivalent to: bachelor's degree in computer science or related field and four years experience implementing and supporting computer applications in a networked environment (LAN and/or WAN).

WORKING CONDITIONS:

ENVIRONMENT:
Office environment.

ELK GROVE UNIFIED SCHOOL DISTRICT

CLASS TITLE: COMPUTER SUPPORT HELP DESK SPECIALIST I

BASIC FUNCTION:

Under the direction of the Regional Services Manager in Technology Services, staff the District's Technology Service Desk; serve as a technical resource to District personnel; log all service requests received over the phone or through e-mail into the District's help desk service call tracking system; assist customers with tier 1 troubleshooting and resolution of software and hardware problems over the phone and through the use of remote control software such as LANDesk; assign calls to field personnel as needed for cases requiring on-site support, advanced diagnostic testing and repair, or direct vendor assistance; provide assistance to walk-in customers at primary work location. Perform imaging and other software installations on computers physically at the help desk service location as time allows.

DISTINGUISHING CHARACTERISTICS:

The Help Desk Specialist I classification is responsible for serving as the first-level technical support and remote problem resolution for District personnel requiring assistance with technology used within the District, including network connectivity, server and access issues, desktop support, application support and telephone. All assistance is provided via phone, e-mail, walk-in, or through the use of remote control software. Cases requiring tier-2 or tier-3 support will be assigned to the correct functional team.

ESSENTIAL FUNCTIONS:

Serve as technical resource to District personnel; operate the Computer Support hotline; answer telephone calls; respond to inquiries and provide technical information, advice or referrals.

Log all service requests into the District's Help Desk service call tracking system.

Record the problem description, including specific error messages and/or symptoms; any troubleshooting steps taken, and the result; and the solution, if applicable. Provide the ticket number to callers.

Provide tier-1 troubleshooting and problem resolution services; resolve basic or routine issues; escalate critical issues to tier-2 or tier-3 support staff or to management; assign service calls requiring on-site service to the appropriate Computer Training and Support Specialist.

Follow-up on closed service requests to insure customer satisfaction.

COMPUTER SUPPORT HELP DESK SPECIALIST I

Assist customers who come into the Technology Services Help Desk location for Computer Support issues.

Prepare and maintain a variety of records and reports related to assigned activities;

Operate a variety of office equipment including a telephone, fax machine, copier, computer and assigned software.

Consult with technical support regarding software and hardware related questions.

Maintain current knowledge of technological advances in the field.

Perform related duties as assigned.

DEMONSTRATED KNOWLEDGE AND ABILITIES:

KNOWLEDGE OF:

Computer hardware systems, peripheral equipment, software applications and operating system languages utilized by the District.
Materials, methods and tools used in the installation, operation and repair of computer systems and applications.
Technical aspects of computer support.
Basic record-keeping and report preparation techniques.
Oral and written communication skills.
Interpersonal skills using tact, patience and courtesy.
Modern office practices, procedures and equipment.

ABILITY TO:

Serve as a technical resource to District personnel.
Troubleshoot and assist customers in resolution of basic hardware and software issues.
Use proper phone etiquette.
Evaluate and prioritize service requests in accordance with department standards.
Develop and maintain excellent customer service skills.
Document problems in writing in a clear, concise manner.
Learn District organization, operations, policies and objectives.
Learn policies and objectives of assigned program and activities.
Communicate effectively both orally and in writing.
Establish and maintain cooperative and effective working relationships with others.
Maintain records and prepare reports.
Understand and follow oral and written instructions.
Meet schedules and timelines.

COMPUTER SUPPORT HELP DESK SPECIALIST I

Maintain current knowledge of technical advances in the field.
Maintain consistent, punctual and regular attendance.
Move hands and fingers to operate a computer keyboard.
Sit for extended periods of time.
Hear and speak clearly to exchange information.
See to view computer monitor and read a variety of materials.

EDUCATION AND EXPERIENCE REQUIRED:

Any combination equivalent to: graduation from high school supplemented by college-level course work in electronics, computer repair, computer science or closely related field, one year experience in the customer service/telephone support industry supporting and/or repairing computers and peripheral equipment.

WORKING CONDITIONS:

Office environment
Heavy phones
Constant interruptions
Heavy computer use/data input

Pleasant Valley School District

Human Resources Department

600 Temple Ave. Camarillo, CA 93010
Phone: (805) 445-8610 FAX: (805) 445-8612
www.pvsd.k12.ca.us

Job Title: Student Information System Specialist

Basic Function: Under the direction of the Director of Educational Technology and Information Systems, the Student Information System Specialist is responsible for the maintenance and support of the District's Student Information System (SIS) program as well as all related software. Support duties include working directly with school and district staff regarding the enrollment, attendance, scheduling, grading and school setup processes. The Student Information System Specialist is also responsible for all state reporting requirements and outside agencies exports.

Representative Duties:

- Participate with the development, testing, and implementation of new and existing computerized systems operated by the organization.
- Participate in the installation and testing of new systems, features, and/or updates; develop and utilize test data in the operating system and evaluate and report on results; assist and provide support to technology staff.
- Analyze hardware and software issues affecting system users, troubleshoot and prioritize these issues. Work closely with vendors, VCOE and technology staff to correct hardware and software issues affecting the various computerized business systems.
- Develop and provide system support and services to local school district personnel with regard to state reporting, student information systems, office applications, web context management, curriculum applications and electronic communication systems.
- Participate in the preparation of documentation and user support materials to assist district personnel in using the systems; develop, organize and write user manuals, guides and other documentation.
- Develop and prepare training materials and participate in user training workshops to present new systems, features, and enhancements; provide one-on-one training as needed.
- Train and assist in the technical preparation of school master schedules.
- Train school and district staff regarding the use of the student information system and any office productivity or other software as it relates to the SIS program.
- Provide a variety of user support plans; answer user questions, explain system operation and requirements, and serve as a liaison between school district users and technology staff with regard to system applications, changes, hardware, communications and other system operations issues.
- Perform tasks to assure successful processing of data; run reports for various software processes including student information management, assessment, and state reporting; monitor output to verify integrity and accuracy of the system. Perform various tasks related to the operation of the various computerized business systems.
- Prepare or produce a variety of custom forms, records and reports related to assigned duties; perform periodic tasks and special projects related to supported software systems, such as assisting and advising district personnel, processing data, monitoring State Attendance preparation and State reporting, progress reporting, grade reporting, scheduling, queries, preparing system specifications and producing reports.
- Operate a variety of office equipment, including networked personal computers, various software

applications, and printers.
- Attend assigned conferences to provide and receive training.
- Performs other duties as assigned.

Knowledge and Abilities:

Knowledge of:

- Database concepts, including file specifications and layouts.
- Large relational databases structure and function.
- Principles, practices, procedures and techniques involved in the collection, processing, input, verification, analysis and reporting of statistical data.
- Applicable sections of the State Education Code, legal requirements and regulations pertaining to student records and attendance.
- Principles, practices and techniques used in spreadsheets and relational databases, specifically student information systems as well as Windows computer operating systems, and Microsoft Office Suite.
- Report writing and statistical record-keeping techniques.
- Principles, theories, problems and practices pertaining to computer operations, peripheral equipment and customer support.
- Interpersonal skills using tact, patience and courtesy.
- Principles of training and providing help desk support.
- Internet usage and terminology.
- Operation and use of computers and related peripheral equipment.

Ability to:

- Maintain and analyze District computer systems and databases to meet the data collection, analysis and reporting needs of the District.
- Maintain confidentiality with discretion of sensitive information.
- Make independent judgments without direct supervision in a fast paced environment.
- Read, understand, follow, and write job procedures, user manuals, and related materials.
- Meet schedules and time lines.
- Write at a professional level, with a focus on accuracy, quality, and clarity required.
- Provide technical expertise and training to users.
- Maintain current knowledge of technological advancements in related areas.
- Interact positively, flexibly and patiently while having to multitask with coworkers, supervisors, community and vendors to maintain cooperative and effective working relationships.
- Travel to attend training meetings or conferences as needed.

Education/Licenses/Experience: Graduation from high school or equivalence and an Associate Degree in computer technology or related field or four years of increasingly responsible experience providing technical support for computer systems or databases, including at least three years of increasingly responsible experience using student information system required. Experience with SQL is desirable.

Licenses/Certificates: Valid California driver's license.

Working Conditions:

Environment: Indoor environment. Driving a vehicle to conduct work.

Physical Demand/Hazards: Dexterity of hands and fingers to operate a computer keyboard. Sitting for extended periods of time. Lifting, carrying, pushing or pulling moderately heavy computer equipment.

Salary Range: Range 128

CAPISTRANO UNIFIED SCHOOL DISTRICT
San Juan Capistrano, California

DIRECTOR IV, EDUCATIONAL TECHNOLOGY

DEFINITION

Under direction of the Executive Director of Technology and Information Systems, provides leadership and guidance in the implementation of district wide educational technology; provides and directs technical assistance and support to schools in a variety of computer programs and functions; plans, organizes, recommends and directs district wide training, software adoptions and implementation; oversees application systems and websites.

EXAMPLES OF DUTIES

- Plans, organizes, schedules and supervises technology staff in developing detailed and definitive technology use plans for each school in the District.
- Acts as a liaison for the Education Division, attending instructional events and meetings with other district and site leaders.
- Contributes to the leadership and direction in technology planning, assessment programs, equipment acquisition, applications development, and establishment of standards for hardware and software.
- Coordinates the roles of site technology coordinators and teachers on assignment to implement goals and integrate technology into instruction.
- Participate in the development and implementation of the District's Technology Plan in support of student achievement
- Work with site administrators to help teachers adapt curriculum materials and lesson plans to utilize technology
- Coordinate professional development activities directly related to the integrated use of technology in all content areas, including student demonstration projects, classroom demonstrations, team teaching, and workshops.
- Reviews curriculum, develop training programs, identify best practices, and coordinate integration of technology into the learning process.
- Participates in development and implementation of departmental goals, objectives, policy priorities, standards and procedures.
- Provides leadership and direction in applications development, to increase access to information and facilitate productivity. Support the selection and training for cloud-based applications and adoption.
- Support the integration of technology associated to the Common Core State Standards.
- Support virtual schools and online programs and other digital curriculum projects.
- Consults with division managers to develop solutions that integrate computer systems and data sharing.
- Facilitates ongoing district wide needs assessment and software technology implementation.
- Manages and implement technology grants and related budgets.
- Coordinates and promote participation in organizations, events, and conferences concerning instructional technology.
- Prepares bid requests, evaluate proposals, and oversee vendor contracts.
- Work to set standards for technology use of students and instructional staff.
- Makes recommendations for employment and evaluate performance of assigned staff.
- Performs other duties as assigned.

DIRECTOR IV, EDUCATIONAL TECHNOLOGY
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QUALIFICATIONS

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

Ability to:
Supervise, coordinate, and direct teachers, support staff, advisory groups and other stakeholder groups; communicate clearly and concisely, orally and in writing; define specific goals and develop sound strategies to accomplish objectives; incorporate new technology into future plans; use strong management and interpersonal skills to facilitate and lead change; comply with the District's customer service standards, as outlined in Board Policy.

Experience:
Minimum five years of teaching experience. Minimum two years of experience at a site or district level coordinating technology integration into instruction. A minimum of two years experience in a site administration position preferred.

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

11/98 Revised 7/03; 9/03; 3/04, 6/05; 2/06; 11/09; 3/13

CLOVIS UNIFIED SCHOOL DISTRICT **POSITION DESCRIPTION**

Position:	Coordinator, Educational Technology & Professional Development	**FLSA:**	Exempt
Department/Site:	Information Technology Services		
Reports to/Evaluated by:	Director of Educational Technology	**Salary Schedule:**	Certificated Admin. Management

SUMMARY

To support the promotion and coordination of technology into the educational process and curriculum, directly benefiting students and educational staff in the educational program. Responsible for the coordination of technological professional development training of Classified and Certificated staff within the Clovis Unified School District.

DISTINGUISHING CAREER FEATURES

The Coordinator, Educational Technology is a high level position that requires interaction and articulation with all employee groups in the District as well as a thorough understanding of all of the typical computer programs used by District staff. At this level, the position has knowledge of a varied set of currently used computer applications as well as being capable of learning new computer applications as they are introduced. The position also has a background of creating training materials to be used in face-to-face settings for small and large group instruction as well as creating training materials to be used by staff via the Internet. The position requires a detail oriented person who can work independently and with groups.

ESSENTIAL DUTIES AND RESPONSIBILITIES

- Serves as a resource to the administrative team in formulating and planning educational technology needs;
- Studies, accumulates and disseminates information on new developments in educational technology, including computing hardware, keeping informed on the latest research trends and developments;
- Attends meetings and serves on committees as appropriate to educational technology;
- Articulates with the District Technology Department concerning all activities regarding educational technology;
- Coordinates, supervises and administers the evaluation, acquisition, purchasing, and processing of District educational technology components;
- Continuously monitors the development and implementation of the site "Technology Use Plan."
- Coordinates with the Director of Educational Technology and/or Assistant Superintendent of Curriculum & Instruction all staff training in the area of integration of technology.
- Provides technology related professional development training for both certificated and classified staff. Trainings to include, but not limited to the following applications: Google Apps for Education,

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MS Office (Word, Excel, PowerPoint, and Access), Outlook and related Team Workplace tools, Web Site/Page Development, Zangle, MUNIS, Windows OS and associated utility applications, Transferring of files and settings due to the "Computer Refresh Program", Other new applications that are used district-wide.

- Develops curriculum and associated lesson plans for training both certificated and classified staff how to use current technology applications.

- Provides coordination for the operations and technical functionality of district-wide instructional technology implementation programs. These programs include: Anytime, Anywhere, Anyone Learning Program, Read 180, Illuminate, Accelerated Reader and Accelerated Math, Library and Textbook Automation program, other learning systems as they are developed on-line.

- Works collaboratively with the Curriculum Services and Innovation Division staff, site staff and Information Technology Services staff to investigate, design, disseminate and implement new technology applications which are designed to enhance student learning and achievement and integrate into the long term plans for technology use.

- Evaluates, motivates, and supervises a team of technology staff members as assigned.

- Coordinates the implementation of the "Anytime, Anywhere, Anyone Learning" Program.

- Participates as a member of the District's Technology Committee.

- Serves as Chairperson of the District Technology Plan Development Team.

- Assists school sites with the development of their site technology plans.

- Develops the technology training component for a "new employee" orientation plan.

- Oversees the use of the Computer Training facility located in the Professional Development Building.

- Performs other duties as may be assigned by the Director of Educational Technology.

QUALIFICATIONS

Knowledge and Skills: Current productivity applications being used by staff, including: Google Apps for Education, MS Word, MS PowerPoint, MS Excel, MS Access, Outlook, and Team WorkPlace, Web Development tools, Zangle, and MUNIS. Technical operational functionality for the following network-based educational tools including: Read 180, Illuminate, Accelerated Reader, and Accelerated Math. Current trends in professional development training options, including how to create and post web-based training activities.

Abilities: Requires the ability to train others in a variety of teaching and learning settings including: one-on-one, small group and large group. The ability to plan, organize, direct, and coordinate the work of staff; delegate authority and responsibility. The ability to provide leadership, investigate, design, disseminate and implement new technology applications which are intended to enhance learning and/or increase operational efficiency. Ability to train others to use network-based solutions for transferring of document files and settings from one computer to another due to the annual "Computer Refresh" program. Must be able to

communicate on both a formal and informal level with a wide range of contacts including District administrators, county officials and outside organizations.

Physical Abilities: Requires good arm, hand, finger dexterity in order to operate keyboard, typewriter and other office equipment. Requires visual acuity to read words and numbers and speaking and hearing to communicate in person or over the phone. Work is normally performed in an office setting with minimal exposure to health or safety hazards.

Education and Experience: Experience in using a wide variety of computer applications including but not limited to: presentation programs, word processing, data base, spread sheets, Illuminate, Read 180, Zangle, and MUNIS. Also requires specific experience with public speaking and previous computer application teaching. Any combination of experience and training that would likely provide the required knowledge and abilities or equivalent may be accepted.

Licenses and Certificates: Administrative Services Credential preferred.

Working Conditions: Work is performed indoors where minimal safety considerations exist. May also require traveling to school sites.

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Capistrano Unified School District
Teacher on Special Assignment - Educational Technology

CAPISTRANO UNIFIED SCHOOL DISTRICT

San Juan Capistrano, California

TEACHER ON SPECIAL ASSIGNMENT – EDUCATIONAL TECHNOLOGY

DEFINITION

Under the direction of the Director of Educational Technology, provide support and guidance in technology curriculum development and integration, teacher development and instructional program design to enhance student achievement.

EXAMPLES OF DUTIES

- Work to improve the overall quality of education received by students and teachers in the district; act as an educational change agent aware of technology curriculum integration theories
- Work with the Director of Educational Technology to do long and short range planning of curriculum technology integration
- Act as a liaison for the Education Division and TIS, attend instructional events and meetings with other district and site leaders
- Participate in development and implementation of departmental goals, objectives, policy priorities, standards, and procedures
- Coordinate and support the site technology coordinators to implement goals and integrate technology into instruction based on ongoing district-wide needs assessment and software technology implementation
- Review curriculum, develop training programs, identify best practices, and coordinate integration of technology into the learning process
- Help teachers to develop curriculum materials and specific lesson plans so that the teachers can carry out their part of the overall school's instructional plan.
- Work cooperatively with school and District personnel in globally assessing student needs, and learning deficiencies, and developing alternative, technology-based solutions to remediate pupil learning problems
- Serve as a resource to meet a wide range of needs including technical support, support for the integration of technology into curriculum; demonstrations, workshops, and facilitation of meetings in support of district technology goals

- Keep up in the computer educational field by studying and working with new pieces of hardware and software. Develop and follow plan for personal professional growth. Remain technically competent. Continue to grow as a professional computer educator, educational leader, and remain professionally active
- Work with school non-teaching and administrative personnel to help them learn to make effective use of computer technology in doing their jobs

- Manage and implement technology related grants

QUALIFICATIONS

Knowledge of:

Current K-12 instructional practices, theories and methods; principles and techniques of educational technology; principles and techniques for project planning; principals of adult learning and effective instruction; online course development and ongoing network building; broad knowledge emerging trends in instructional technology; educational curriculum and instructional goals and objectives, and the educational trends and research findings relative to effective use of technology for learning; behavior management strategies; socio-economic and cultural background differences of the general school population.

Ability to:

Plan, organize, develop and conduct a comprehensive teaching and instructional program to support the integration of technology to enhance learning. Coordinate and guide teachers, support staff, advisory groups and other stakeholder groups in developing programs to support learning; communicate clearly and concisely, orally and in writing; analyze problems and prepare written and oral reports; define specific goals and develop sound strategies to accomplish objectives; facilitate projects and programs in support of technology use and integration; demonstrate strong interpersonal skills to facilitate and lead change; comply with the District's customer service standards, as outlined in Board Policy.

Experience:

At least three years teaching experience, preferably including experience in coordinating technology integration into instruction and guiding other staff in technology integration.

Education:

Current California teaching credential; a minimum of three years teaching experience, experience in computer applications and teaching methodologies.

Masters degree in related area or postgraduate educational technology coursework preferred.

Certificate Requirement:

Possess a current California teaching credential, English learner authorization and No Child Left Behind (NCLB) certification as appropriate.

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