



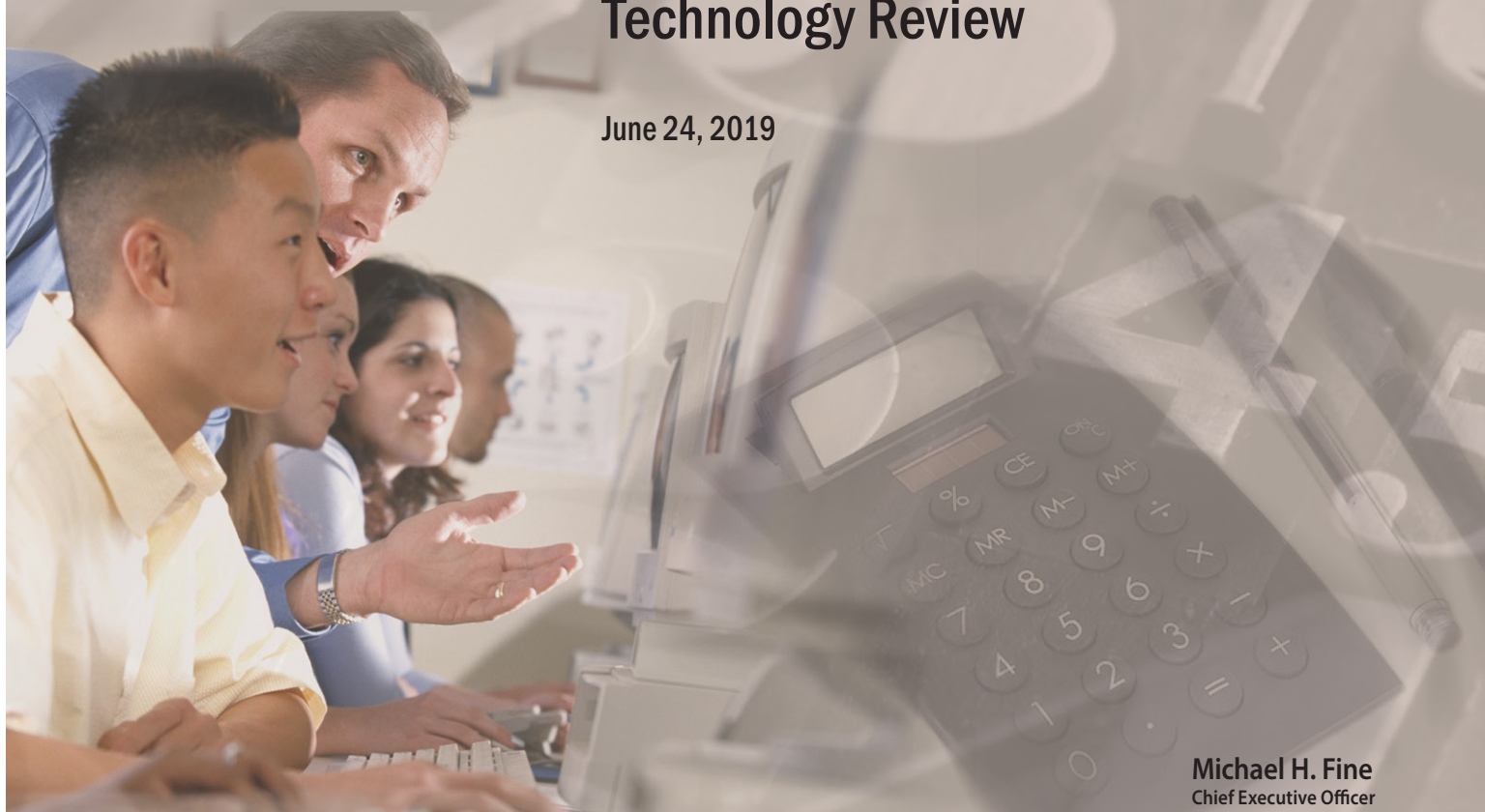
FISCAL CRISIS & MANAGEMENT
ASSISTANCE TEAM

CSIS California School Information Services

Sequoia Union High School District

Technology Review

June 24, 2019



Michael H. Fine
Chief Executive Officer





June 24, 2019

Mary E. Streshly, Ed.D.
Sequoia Union High School District
480 James Ave
Redwood City CA 94062

Dear Superintendent Streshly:

In October 2018, the Sequoia Union High School District and the Fiscal Crisis and Management Assistance Team (FCMAT) entered into an agreement for a review of the district's technology program and services. Specifically, the agreement states that FCMAT will perform the following:

1. Conduct an analysis of the district's state of technology including planning, project management, organizational structure and department staffing, and make recommendations for improvement, if any. Interview principals, department directors and classified staff to gather data on the technology support needed. Provide a recommended organizational chart to best meet the district's technology needs at both the central office and schools.
2. Review and analyze the district's technology master plan and upcoming projects, and make recommendations for improvement, if any.
3. Analyze the status of the following, and make recommendations for improvement, if any:
 - a. Districtwide technology planning
 - b. Project management
 - c. Help desk system and ticketing
4. Review the job descriptions and staffing of the technology department, including any site-level support, and make staffing recommendations based on the support needed to meet the district's technology requirements. Provide sample job descriptions for any new positions recommended.

FCMAT

Michael H. Fine, Chief Executive Officer

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Administrative Agent: Mary C. Barlow - Office of Kern County Superintendent of Schools

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

We appreciate the opportunity to serve you, and we extend thanks to all the staff of the Sequoia Union High School District for their cooperation and assistance during fieldwork.

Sincerely,

A handwritten signature in black ink that reads "Michael H. Fine". The signature is written in a cursive, flowing style.

Michael H. Fine

Chief Executive Officer

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About FCMAT

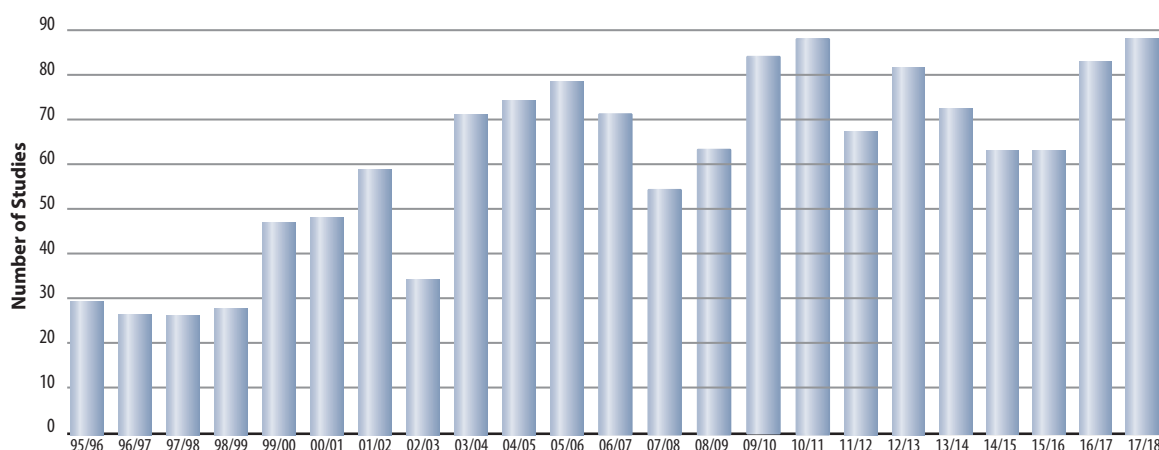
FCMAT's primary mission is to assist California's local K-14 educational agencies to identify, prevent, and resolve financial, human resources and data management challenges. FCMAT provides fiscal and data management assistance, professional development training, product development and other related 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, support the training and development of chief business officials and help to create efficient organizational operations. FCMAT's data management services are used to help local educational agencies (LEAs) meet state reporting responsibilities, improve data quality, and inform instructional program decisions.

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 LEA to define the scope of work, conduct on-site fieldwork and provide a written report with findings and recommendations to help resolve issues, overcome challenges and plan for the future.

FCMAT has continued to make adjustments in the types of support provided based on the changing dynamics of K-14 LEAs and the implementation of major educational reforms.

Studies by Fiscal Year



FCMAT also develops and provides numerous publications, software tools, workshops and professional development opportunities to help LEAs operate more effectively and fulfill their fiscal oversight and data management responsibilities. The California School Information Services (CSIS) division of FCMAT assists the California Department of Education with the implementation of the California Longitudinal Pupil Achievement Data System (CALPADS). CSIS also hosts and maintains the Ed-Data website (www.ed-data.org) and provides technical expertise to the Ed-Data partnership: the California Department of Education, EdSource and FCMAT.

FCMAT was created by Assembly Bill (AB) 1200 in 1992 to assist LEAs to meet and sustain their financial obligations. AB 107 in 1997 charged FCMAT with responsibility for CSIS and its state-wide data management work. AB 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. AB 2756 (2004) provides specific responsibilities to FCMAT with regard to districts that have received emergency state loans.

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

On September 17, 2018 AB 1840 was signed into law. This legislation changed the how fiscally insolvent districts are administered once an emergency appropriation has been made, shifting the former state-centric system to be more consistent with the principles of local control, and providing new responsibilities to FCMAT associated with the process.

Since 1992, FCMAT has been engaged to perform more than 1,000 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 Michael H. Fine, Chief Executive Officer, with funding derived through appropriations in the state budget and a modest fee schedule for charges to requesting agencies.

Introduction

Background

The Sequoia Union High School District is in the San Francisco Bay Area, primarily serving the eastern San Mateo County communities of Atherton, Belmont, East Palo Alto, Ladera, San Carlos, Menlo Park, Portola Valley, Redwood City, and Woodside.

According to Ed Data (<http://www.ed-data.org>) the 2017-18 enrollment was approximately 10,000 students, and they are served in four comprehensive high schools, one continuation school, and numerous other operational facilities that require technical support.

During the 2017-18 school year approximately 39.6% of students were eligible for the federal free and reduced-price meal program and 14.4% were English language learners. The unduplicated pupil count of free/reduced-price meals, English learners and foster youth during this same time was 3,416.

Study and Report Guidelines

FCMAT visited the district on December 4, 5 and 6, 2018 to conduct interviews, collect data and review documents. Following fieldwork, FCMAT continued to review and analyze documents. This report is the result of those activities and is divided into the following sections:

- Executive Summary
- Staffing Overview
- Technology Planning
- Project Management
- Help Desk
- Technology Support Staffing and Organization
- Appendices

FCMAT's reports focus on systems and processes that may need improvement. Those that may be functioning well are generally not commented on in FCMAT's reports. 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 plain language, discourages the use of jargon and capitalizes relatively few terms.

Study Team

The study team was composed of the following members:

Scott Sexsmith
FCMAT Intervention Specialist
Bakersfield, CA
Irvine, CA

Brianne Ford*
Chief Technology Officer
Irvine Unified School District

Leonel Martínez
FCMAT Technical Writer
Bakersfield, CA

Jerry Waymire
FCMAT Consultant
Hanford, CA

*As a member of this study team, this consultant was not representing her employer but was working solely as an independent contractor for FCMAT.

Each team member reviewed the draft report to confirm accuracy and achieve consensus on the final recommendations.

Executive Summary

Staffing Overview

The Technology and Information Services Department is led by the director of instructional technology who reports to the assistant superintendent of the Educational Services Division. The department is composed of four groups, Data and Voice Services, Programming, Web and Server Services, Information Services, and Instructional Technology. A total of 13.6 full-time equivalent (FTE) are assigned to the department. The district augments technology support through additional school-supervised site technology managers and assistants, partially released and stipended teachers, and student information systems specialists embedded in departments.

Technology Planning

The district's current Technology Master Plan (2016-2019) expires June 30, 2019 and was finalized and presented to the Board of Education in September 2016.

The technology plan references the district goal of engaging and preparing students to excel in a global society but does not include specific objectives defining how technology will be used to accomplish this goal. The plan document does not articulate clear expectations for the utilization of technology in classrooms or concrete steps to increase its use.

The technology plan provided little information on the district's technology budget and alignment of that budget with district goals. Recent investments in technology have relied heavily on one-time bond funds. The plan does not identify an ongoing source of revenue to sustain those investments when the bond is no longer available.

A new technology plan development effort was underway, and an inclusive team of school, district, and community members meet monthly to work on drafting the new document. The approach to plan development included a review of current conditions and needs assessment. The director of instructional technology and the instructional technology specialist lead this project with support from a consultant. The new plan effort launched shortly before FCMAT's visit, and little additional information was available at that time.

Project Management

The district's project management practices are ill-defined. No consistent process is used, and no documentation standard is followed for projects.

The director of instructional technology generally has the authority to approve projects. However, the district does not have defined criteria for approving or denying project requests. Once a project has been approved, the director of instructional technology catalogs the project on a spreadsheet he shares with the technology management team. The spreadsheet includes the project name, staff lead, due date, funding source, and a brief description or status update. Beyond the spreadsheet, the level of additional project documentation varies and is largely informal. The district does not have a project charter document to clearly define the scope, timelines, and responsibilities for projects.

The district does not have an established method of tracking project tasks or quickly identifying how delays affect the overall project. The high-level status updates on the shared project spreadsheet do not provide enough detail to determine if projects are on track.

Help Desk

The district uses the SchoolDude work order system developed by Dude Solutions, Inc. This is a web-based system that allows clients to initiate a work order by filling out an online form. This creates a ticket and assigns it to a technician. Once the ticket is completed, the ticket is closed and the client is notified.

Technology staff report SchoolDude does not accept email support requests, and the staff report they also receive these requests through direct emails to IT staff, the district two-way radio system, phone calls and verbally. The system also does not generate useful reports that can be analyzed to better understand user needs.

The district should consider replacing the work order system with one that better meets the district's needs and provides the ability to accept a support request from an email and generate reporting of requests to allow the district to better analyze this information.

Technology Support Staffing and Organization

Most reported duties are accurately contained within existing job descriptions. However, FCMAT has recommended improvements, including clarifying job titles and reporting structures. For several roles, the current job descriptions do not distinguish between skills and responsibilities required at each level of the classification. In many cases, FCMAT recommends the reclassification of positions using more accurate job titles and descriptions.

The position of director of instructional technology should be moved to lead a newly formed Instructional Technology group within the department, and a chief technology officer position should be created to better address district needs related to technology planning, communications, and collaboration.

Findings and Recommendations

Staffing Overview

The Technology and Information Services Department is led by the director of instructional technology who reports to the assistant superintendent in the Educational Services Division. The department is composed of four groups, Data and Voice Services, Programming, Web and Server Services, Information Services, and Instructional Technology. A total of 13.6 full-time equivalent (FTE) are assigned to the department. The district augments technology support through additional school-supervised site technology managers and assistants, partially released and stipended teachers, and student information systems specialists embedded in departments.

The district office technology staff includes the following:

- 1 director of instructional technology
- 1 technology and information services support assistant
- 1 part-time (0.6 full-time-equivalent) instructional technology specialist
- 1 data and voice services manager
- 4 technology maintenance specialist III positions
- 1 technology maintenance specialist I
- 1 programmer/web services manager
- 1 information services manager
- 1 information services specialist III
- 1 information services specialist II
- 1 information services specialist I

Each school site also has one or more technology manager positions (five total) and many of the sites also include a technology assistant position. These positions report directly to the school sites, not the technology department.

More detailed information on staffing can be found in the Technology Support Staffing and Organization section of this report.

Technology Planning

The district's current Technology Master Plan expires June 30, 2019. The district requested the FCMAT study team review the current plan, upcoming projects, and planning activities and provide recommendations for improvement. This section provides an analysis of the current plan, the development of the successor plan, and ongoing coordination of technology initiatives.

Current Technology Master Plan (2016-2019)

The current Technology Master Plan was finalized and presented to the district Board of Education in September 2016. Forty members formed the Technology Master Plan Committee and provided input into the plan structure and content. Members included district office leaders, principals, assistant principals, teachers, librarians, technology department staff, parents, current students and recent graduates. The plan reviews technology access and use, provides an overview of current and planned technology initiatives, and includes student and staff survey results for reference.

The technology plan references the district goal of engaging and preparing students to excel in a global society. However, the document does not include specific objectives defining how technology will be used to advance the district goal. Instead, the plan provides a narrative listing the software programs in use and devices available to students. It also includes references to what teachers can do with technology. However, the plan does not articulate clear expectations for the use of technology in classrooms or concrete steps to increase use.

The professional development section of the technology plan outlines concerns related to measuring teacher skills and comfort with technology. The district formerly used a survey provided through the state-funded California Technology Assistance Project (CTAP). This survey helped to measure teachers' technology proficiency organized into discrete sets or areas. When the CTAP program lost funding, the district employed BrightBytes, a private company, to conduct a survey to help inform the technology plan. However, funding to monitor technology progress was not continued after the initial year. The BrightBytes survey results incorporated into the technology plan indicated 70% of teachers are comfortable with foundational technology skills, 43% utilize online skills regularly, and 36% find multimedia tasks easy to perform. The technology plan states that professional learning supports district initiatives related to the Common Core Standards implementation and modifying lessons to incorporate technology. However, during the FCMAT site visits, Technology and Information Services Department staff and school site leadership reported that nearly all technology professional learning and coaching centered on implementing district software programs. The schedule of after-school professional learning provided by the district confirmed that most events focused on the implementation of the new learning management and assessment systems.

The technology plan provided little information on the district's technology budget and its alignment with district goals. The funding information included in the document outlined one-time investments from bond revenue to support infrastructure upgrades, classroom audio/visual improvements, and increases in student devices. The plan does not identify an ongoing source of revenue to sustain those investments when the bond is no longer available.

The technology plan does not define clear accountability measures. The description of initiatives included throughout the plan does not include clear objectives or measurable outcomes. Although the plan references collecting data semiannually to assess progress, the specific data elements to be used are not defined. As previously stated, the technology survey, BrightBytes, was discontinued after the plan was drafted, and longitudinal measures are not available.

New Technology Master Plan Process

During the FCMAT study team's visit, the district indicated that a new technology plan development effort was underway. An inclusive team of school and district employees and community members meet monthly to work on drafting the document. The approach to plan development included a review of current conditions and a needs assessment. The director of instructional technology and the instructional technology specialist lead this project with support from a consultant. The new plan effort launched shortly before the on-site visit from FCMAT, and little additional information was available at that time.

Coordination of Technology Goals and Initiatives

In addition to reviewing the written Technology Master Plan, the FCMAT study team interviewed school site staff and Technology and Information Services Department members to assess the coordination of technology initiatives. Staff provided an overview of the district's culture of decentralized decision-making. School sites have authority to hire and evaluate their primary on-site technology support provider. Schools also can set their own targets for access to technology equipment. Schools receive \$35,000 annually from the district to support refreshing technology. The comprehensive high schools recently received an additional \$100,000 in bond revenue for each of three years to augment their technology budgets.

Decentralized funding and procurement of technology has led to significant inequities in school site technology programs. Schools reported using general fund dollars and parent donations to supplement resources provided by the district. Additionally, some schools added hours to a site technology assistant position to increase on-site support. School leaders expressed frustration at not knowing which 1-to-1 technology programs would be best for their campuses. These 1-to-1 programs may follow the following models:

- One device for each student kept in every classroom for use during the school day.
- One device for each student checked out to the student for use at home and school.
- A bring-your-own-device (BYOD) program that encourages students to use their personal laptop or mobile device at school.

Many school districts blend these programs (e.g., a BYOD program with a school device check-out option for students who need it). The comprehensive high schools visited by FCMAT were divided in their preferred approach to student access.

School and department leaders reported uneven communications on technology initiatives. School staff felt that Technology and Information Services staff and leadership were responsive to their needs when they requested support. Schools further indicated that communication about large-scale projects was inadequate during early planning and selection phases. Communications improved during the implementation phase for large systems, such as the learning management system, Canvas. Project communications are discussed in greater detail in the Project Management section of this report.

Technology and Information Services Department staff discussed concerns about the coordination of activities in other departments that rely on the technology team. Facilities projects, new curriculum and software adoptions, and other initiatives greatly affect the technology team. These initiatives have fixed timelines that the department cannot influence. Many of these initiatives often converge during peak times for the first day of instruction at the schools.

Technology plans should provide a roadmap for technology investments and initiatives for a three- to five-year period. The district technology plan does not include clear objectives or quantify investments needed in technology. Without this information, the district cannot effectively forecast technology costs and staffing needs. A detailed plan and associated budget can allow the district to plan for high-cost investments, like the current network update. Technology adoption suffers when long-term funding is uncertain. Because one-time funding sources were used for infrastructure, audiovisual and device purchases, staff question whether technology initiatives will move forward at their sites. Improving instructional practices and student learning through technology requires a comprehensive professional learning program tied to teachers' content areas. Although training on specific software tools is necessary, the exclusive focus on this area will inhibit progress in technology application in classrooms. Access to technology in the district has increased quickly as a result of recent purchases facilitated by the bond; however, the district lacks an effective way to measure the impact of those investments. The discontinuation of the BrightBytes survey without an alternative way to measure teacher and student technology proficiency, levels of access, and classroom use makes it difficult to assess effectiveness of technology supports and progress in technology adoption at the schools.

Strong technology plans will include the following:

- Educational Objectives - Technology-specific objectives for teaching and learning that directly support districtwide curriculum goals.
- Professional Learning - Detailed professional learning plans that focus on pedagogical shifts in the classroom and use technology in other content-area and instructional opportunities.
- Support and Infrastructure - Identification of the key technical and instructional supports needed to build confidence in teachers and ensure a reliable, responsive technology program.
- Budget - A comprehensive overview of current and planned spending on technology, both at the district and site levels.
- Progress Monitoring - Defined measures for assessing the progress of the plan's implementation and the desired teaching and learning outcomes of the plan goals. This may include surveys, project management tools, software usage data, equipment inventory and performance data, and other data sources.

The district's decentralized decision-making structure has resulted in ambiguity about technology purchasing, the availability of support for schools, and the role of the Technology and Information Services Department. Decentralized decision-making can lead to choices that are aligned to school culture and student needs; however, it can also contribute to inequity in technology access and instructional program. Technology standardization and centralization can reduce program costs, streamline support, and create a more reliable and sustainable infrastructure for technology use.

Many decentralized districts adopt a hybrid approach for technology procurement and implementation. These districts define a baseline level of technology provided by the district. Teacher computers, classroom audiovisual equipment, an adequate number of student devices, and technology infrastructure are funded and purchased centrally. For augmentative or specialized purchases, the district establishes criteria and a process agreed to by the schools. One criteria many districts use is that all educational software must be reviewed for compliance with student data privacy laws before purchase. Schools have discretion to define a program that meets their

needs within the boundaries defined by the technology department. Similarly, districts will define targets for strong instructional practices that incorporate technology. These defined practices are used to drive professional learning, rather than focusing training solely on individually purchased school software programs.

Recommendations

The district should:

1. Use the planning effort underway to develop a new Technology Master Plan that includes detailed educational objectives, professional learning targets, support and infrastructure plans, budget information, and progress monitoring.
2. Identify a survey or other sources of evidence to monitor the impact and implementation of the district's technology plan.
3. Consider defining a baseline standard for technology access, equipment, and support for all sites. Dedicate ongoing resources to sustain the baseline access.
4. Consider defining criteria and a process for site purchases beyond the baseline support.
5. Incorporate support demands from other departments (facilities, educational services, other cabinet officials) into technology support planning to avoid conflicts in resources.
6. Develop a communications plan in conjunction with the new technology plan adoption that provides early and continuous updates on planned projects. Provide a comprehensive plan progress update at least annually to representatives of those affected.

Project Management

FCMAT conducted a review of technology project management, including project initiation, documentation, scope definition, execution, and closeout procedures. Project management practices in the district are not well-defined, with no consistent process or documentation standard.

Requests for projects come from a variety of sources. Generally, department heads or principals may send an email or request a meeting with a Technology and Information Services Department manager to secure technology support for an upcoming project. Projects may be identified at the cabinet level and communicated to the instructional technology director through the assistant superintendent, educational services. The instructional technology director reported that he first learns of some projects when the purchase order is given to him for approval. Similarly, Technology Information Services staff indicated they often learned about new software program implementations after the program was selected and only days before training was scheduled. Technology staff stated they often have little input into projects and join the project after a product or solution is selected. The director of instructional technology generally has the authority to approve projects, but the district lacks defined criteria for approving or denying project requests.

Once a sizable project has been approved, the director of instructional technology catalogs it on a spreadsheet he shares with the technology management team. The spreadsheet includes the project name, staff lead, due date, funding source, and a brief description or status update. Beyond the spreadsheet, the level of additional project documentation varies and is largely informal. The district does not have a project charter document to clearly define the scope, timelines, and responsibilities for projects. For many of the projects on the list, the documentation includes email updates and technical references. Many projects do not have detailed tasks lists or other traditional project artifact such as timelines, resources, responsibilities, etc. The Information Services group maintains a project list separate from the technology project spreadsheet maintained by the director of instructional technology, and technology related facilities projects are also tracked separately. The tracking spreadsheets do not show how well staff balance their workloads.

The district's project implementation processes also vary. Larger projects, like the learning management system implementation, include significant investments in and documentation related to staff training. During the implementation, schools received communications on training opportunities early and frequently. Other projects have limited transition, support, or training attached. The district does not have a system for tracking project tasks or quickly identifying how delays affect the overall project. The high-level status updates on the shared project spreadsheet do not provide enough detail to determine if projects are on track. The technology team reviews projects and provides verbal updates during team meetings every other week, but there are no standard expectations about the frequency or style of communications with those affected throughout implementation. Similarly, the district does not have a defined process for documenting issues and changes throughout the life of projects.

The district's practices for managing a project's transition from implementation to ongoing support are inconsistent. The project lead is often assigned to provide ongoing support for the new system or equipment. In instructional technology, this informal support expectation reduces the capacity to take on new projects or resume activities that were suspended during the project. The instructional technology specialist reported that training needs for the learning management and assessment systems have superseded other educational technology and training opportunities.

Staff responsible for first-tier support do not consistently receive training in new products. The lack of a formal close-out and support transition plan keeps the district in a state of implementation on large projects.

Projects do not have clearly defined objectives tied to business or educational outcomes. Instead, projects are defined by the product being implemented. For example, the new work order system is defined as “New Support Desk.” The project team has not defined the changes it expects from the new system such as improved response times, increased use, or higher customer service ratings. Few department staff reported having input into the selection of the proposed system. The lack of clear objectives makes it difficult to evaluate technology projects. As those affected recommend changes that affect project timelines or support, the district lacks concrete objectives to make decisions based on the value the change brings to the organization. Once a project is complete, the district does not consistently and systematically collect feedback from those affected to evaluate success.

Inconsistent and informal project management practices in the district contribute to staff workload issues, missed timelines, and limitations on support. Projects are selected based on staff capacity and timing instead of on their value to the district. Without clearly defined project objectives and scope, projects often evolve to use more resources than expected. Those involved may add additional modules to a software integration project without reassessing the technology staff's capacity and availability to do the work. The absence of detailed tasks lists and a single repository for project documentation leads to conflict in resources and surprise delays in implementations. The ongoing support demands of each project are not formally assessed and incorporated into staffing plans. Each project has a residual demand for training and support that ultimately affects responsiveness to schools. Inconsistent project communications leave staff and others affected feeling confused or concerned about project progress.

Many districts adopt a formal project management process, including procedures, documentation templates, and communications expectations. Consistent project management practices improve the success rate of projects and the manageability of staff workload. Projects are formally reviewed and approved. At that time, technology leadership and others affected define a clear scope and objectives. This allows technology staff to make a more informed commitment of time and resources. This process also allows the team to explicitly define the value the project is expected to generate for the district. Districts often use common project management software to track tasks for projects. Consistent use of this software engages project staff and provides high-level visibility into tasks, resources, and issues across all projects. Districts with strong project management programs will also close out projects by conducting assessments of the implementation process and the impact of the project. The closeout process defines a clear transition from project management to operational support of the technology.

Recommendations

The district should:

1. Consolidate multiple project lists (instructional technology director's spreadsheet, Information Services project list, technology related facilities project documents) into a single document.
2. Create a process and criteria for request and approval of technology projects.

3. Consider selecting project management software to aid in project documentation and workload management.
4. Define clear expectations for project documentation and communications to those affected.
5. Define measurable business or educational objectives for current and future projects.
6. Discuss and plan for transition from project implementation to ongoing support for all technology projects before starting project work.
7. Include technology staff early in the selection process for software and technology equipment under consideration in other departments and schools.
8. Document standard timelines and resource needs for common, recurring projects (e.g., classroom audiovisual installation, software adoption with data integration) to help those affected and technology staff plan upcoming projects incorporating realistic timelines.
9. Provide project management training to the Technology and Information Services management team, as well as key technical personnel and outside community members who are involved.
10. Provide regular updates to district leadership related to current and planned technology projects.

Help Desk

The district uses the SchoolDude work order system developed by Dude Solutions, Inc. This is a web-based system that allows clients to initiate a work order by filling out an online form. This creates a ticket and assigns it to a technician. Once the ticket is completed, it is closed and the client is notified. Technology staff report that the SchoolDude work order system does not accept email work orders, does not interface with the district's current asset inventory system, and has limited reporting features. The system is used primarily to provide them with a list of work to be completed.

The Technology and Maintenance departments use the system, and all school sites submit work orders through it. The technology maintenance specialists and the site technology managers indicated that the system generates approximately 60% of their work. The information services specialists reported they receive some support requests through the work order system, but most are sent from users to an email account named "icsupport" that is set up for support request. Technology staff stated the SchoolDude work order system does not accept email support requests so the icsupport email requests are tracked separately in Google. They reportedly also receive work requests through the district two-way radio system, phone calls and verbally although they encourage staff to use the work order system or icsupport email account. School site administrators believe teachers primarily request support through the two available ticketing systems, but administrative and office staff primarily call their on-site technician.

Technology staff indicated they usually prioritize their work based on when a ticket is submitted unless a site or classroom is down, which becomes the top priority. The site technology managers also receive input from a school site administrator and from district office technology management when setting work priorities. Staff report they are sometimes uncertain how to prioritize work since they receive conflicting priorities from district technology management and the school site administrator.

Because districts rely more on network resources for academic use, it is important for the technology to be available and working properly when students and staff need it. Technology staff members should meet district administrative needs, but also the school sites' increasing academic requirements. To accomplish this, many districts implement a work order system to track support requests, prioritize work and provide the district with useful reports. Many work order systems include features that can provide the district with the information necessary to make informed decisions. These features may include interfacing with the district's current inventory system, allowing automatic routing and escalation of work orders, including mobile access so technicians can get support requests when in the field and providing the ability for customer feedback and surveys. Once set up, districts will encourage all work requests to go through the work order system, even if technology staff need to enter some requests. Districts can use the data from the work order system to help determine staffing needs and support trends. With the current advancement in technology, especially in cloud resources and inexpensive-to-manage devices such as Chromebooks, technicians can support a greater number of devices. Using only the number of devices at a site as the indicator of the number of technical support staff needed may no longer be valid. Using the data from a full featured work order system may provide better information to determine staffing needs.

Recommendations

The district should:

1. Replace the current work order system with a system that better meets the district's needs and provides the ability to accept a support request from an email and reporting of requests.
2. Encourage all staff to use the work order system.
3. Use the data generated by the system to determine staffing needs and support trends.

Technology Support Staffing and Organization

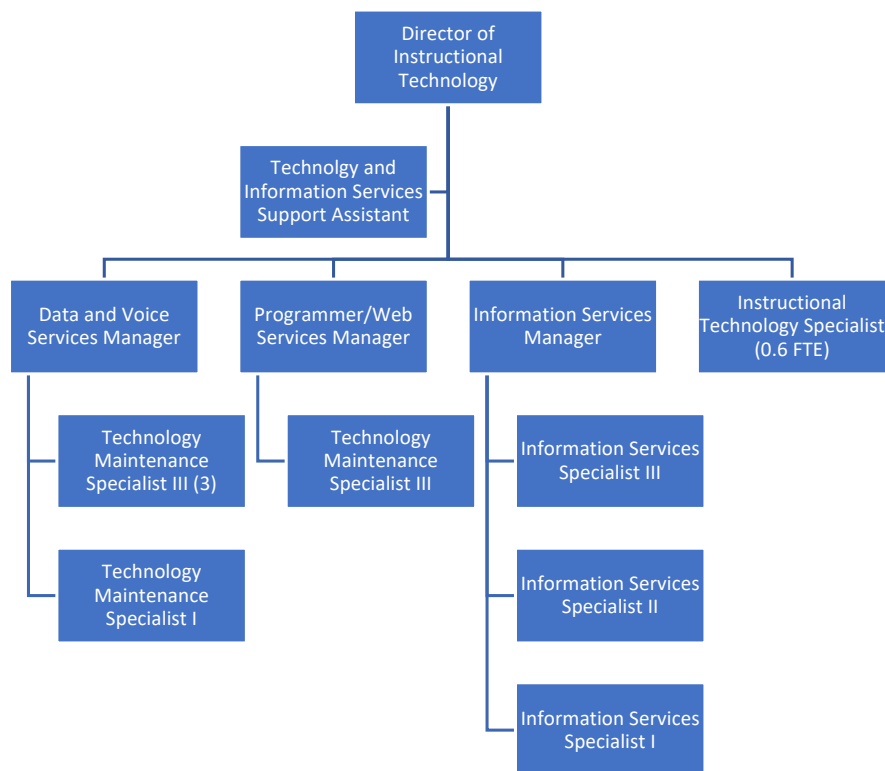
The Technology and Information Services Department includes 14 positions based at the district office. The district augments technology support through additional school-supervised site technology managers and assistants, partially released and stipended teachers, and student information systems specialists assigned in departments. The district office technology staff includes: one director of instructional technology, one technology and information services support assistant, one part-time (0.6 full-time-equivalent) instructional technology specialist, one data and voice services manager, four technology maintenance specialist III positions, one technology maintenance specialist I, one programmer/web services manager, one information services manager, one information services specialist III, one information services specialist II, and one information services specialist I.

The director of instructional technology leads the department and reports both to the assistant superintendent, educational services and to the assistant superintendent, administrative services. The department includes four functional groups:

Team	Primary Responsibilities
Data and Voice Services	Technology infrastructure, network connectivity, data center equipment, end-user devices, telecommunications, and audio-visual equipment.
Programming, Web and Server Services	Systems administration, directory (user account systems), firewall management, data and systems integrations.
Information Services	State and federal reporting, student information system, learning management system, related student databases and software support, school operations support (enrollment, scheduling, attendance, report cards).
Instructional Technology	Technology plan development, professional learning, instructional practices, collaboration with Educational Services Division.

The manager or lead for each functional area reports to the director of instructional technology. The department is organized as shown below.

Current District-Level Organizational Chart



The following information, analysis, and recommendations are designed to help the district optimize its technology program.

Director and Assistant

Director of Instructional Technology

The district has one director of instructional technology position that oversees the Technology and Information Services Department.

The job description indicates this is a leadership position reporting to the assistant superintendent, educational services. The description also states that the position will work closely with the Administrative Services Department, recognizing the more operational aspects of Technology and Information Services. The position is certificated, and the job description details a variety of responsibilities, including staff supervision, technology planning, policy development, research, staff development, oversight of systems and procedures, and maintaining strong working relationships.

During FCMAT's site visit, the incumbent director of instructional technology indicated most of his time is spent working with the Data and Voice Services group or managing large districtwide projects. The increase in the number of devices on school campuses, an overhaul of the district's wireless infrastructure, and the impact of facilities projects have necessitated more frequent meetings and direct work with the Data and Voice Services group. The director of instructional technology reviews and approves all technology purchase orders for school sites and departments and

conducts several different staff meetings each month. The incumbent meets with site-based technicians monthly in a roundtable format to provide project updates and gather feedback. Partially released site-based instructional technology coaches meet with the director and the instructional technology specialist monthly as the Technology Integration Council (TIC). The director also coordinates monthly meetings to support the development of a new technology plan, facilitates meetings with the full Technology and Information Services Department every two weeks and attends many of the group meetings (Information Services, Data and Voice Services) weekly.

The incumbent's direct reports include an administrative assistant, instructional technology specialist, data and voice services manager, programmer/web services manager, and an information services manager. The study team learned that the director either evaluates or jointly evaluates nearly all the technical staff under the three department managers. In addition to personnel management, the incumbent directly leads several department projects and they are assigned to eight of the 17 priority technology projects for the 2018-19 fiscal year. The director of instructional technology also reported that he was assigned to coordinate summer school for the district and estimated that the work would require approximately 12 hours of his time per week. The peak period of summer school work directly overlaps with peak periods in the Technology and Information Services Department related to meeting the operational needs of school opening and supporting facilities projects.

The director of instructional technology reported spending 70% of his work time on projects, personnel and tasks internal to the Technology and Information Services Department, with the remaining 30% spent working directly with school sites. The director has limited interactions with district cabinet members. Technology decisions made at the cabinet level are communicated to the director through the assistant superintendent, Educational Services. Although the position's title implies a focus on instructional technology, the director indicated he spends most of his time focused on technical support, infrastructure, and facilities bond projects.

The job description for the director of instructional technology covers a broad range of responsibilities, from infrastructure to staff development. The position requires both high-level leadership and the performance of technical tasks, including updating the district website. The district's technology program has grown to include more than 5,000 network devices and is moving toward 1-to-1 computing for its more than 10,000 students. Large facilities and technology infrastructure projects leave little time for more strategic activities, including technology planning and leading important technology-supported shifts in instructional or organizational practice. Technology connects to each department and school in the district. The exclusion of a technology leader at the cabinet level may contribute to missed opportunities to maximize technology to create business efficiencies or implement innovative and progressive educational tools to improve student learning.

Districts similar in size to the Sequoia Unified High School District often have a chief technology officer (CTO) at the cabinet level. The CTO's primary role is to develop and implement a technology vision in alignment with the district's instructional goals and operational needs. As technology needs grow, technology directors may become drawn in as technical, working managers. When this occurs, strategic activities, including collaborating across the district, developing staff, and long-term planning, suffer. The cabinet-level placement of the position leads to well-informed decision-making through strong connections to district leadership and a thorough understanding of its goals. A cabinet-level CTO can offer proactive technology solutions to district issues. When technology is led by a working manager without access to cabinet, decisions tend to be more reactionary. Because technology has widespread impact on business departments, curriculum departments and the school sites, many districts assign the CTO to report directly to the superintendent.

Recommendations

The district should:

1. Create a new position and job description for a cabinet-level chief technology officer (CTO). A sample job description is attached as part of Appendix A to this report.
2. Revise the director of instructional technology position to focus on coordination of educational technology and professional learning, reporting to the CTO. A sample job description is attached as part of Appendix A to this report.
3. Evaluate the current technical and evaluative responsibilities of the director of instructional technology and reassign to appropriate managerial and technical staff. Provide technical and leadership training where needed.
4. Reassign summer school coordination to a role outside of the Technology and Information Services Department.

Technology and Information Services Support Assistant

The Technology and Information Services Department has one technology and information services support assistant. The job description for this position outlines responsibilities related to both administrative and technical support. The administrative duties include managing purchasing, developing reports, coordinating records requests, assisting with contract management, assisting with budgeting, and scheduling technology meetings and events. The technical responsibilities described in the job description include responding to and resolving help desk tickets and creating and maintaining user accounts. The job description is explicitly distinguished from other administrative and secretarial classifications in the district by these technical support expectations. The position reports to the information services manager.

During the FCMAT fieldwork, the position incumbent described day-to-day work that included administrative and technical responsibilities. The incumbent reports to the director of instructional technology, but supports all department managers with scheduling meetings, ordering equipment and software, managing the department budget, and administering contracts. The incumbent creates and manages user accounts and email addresses and described difficulties in creating and assigning appropriate access levels to accounts. Policies or guidelines related to user accounts are not well defined. The incumbent reportedly often has to wait for responses from the Human Resources Department to know what systems and files each new employee should be able to access.

The job description closely aligns with the incumbent's duties. The position acts as a catch-all for first-level user account support and a variety of administrative responsibilities. Combining first-tier help desk support and department operational support is common in technology departments in small to medium-sized districts.

As the amount and complexity of technology used in the district increases, the time required to manage user accounts may grow beyond what can be supported with the current structure. General administrative support for the department may suffer during peak hiring and new user account periods. Many districts will implement account automation software or distribute account creation responsibilities among appropriate technical staff.

Recommendations

The district should:

1. Update the technology and information services support assistant job description so that this position reports to the proposed chief technology officer.
2. Document appropriate technology access levels by employee classifications and work locations to ensure consistent creation of user accounts.
3. Quantify the volume of work necessary to create and maintain user accounts. Determine whether a long-term solution is needed to aid in the creation and maintenance of user accounts, including investing in an account automation software tool integrated with the human resources system or involving additional staff in account creation.

Instructional Technology

The director of instructional technology, with support from an instructional technology specialist, leads district instructional technology efforts. The instructional technology specialist is shared by instructional technology (60%) and assessment (40%). The district uses partially released teachers and stipended coaches to augment the instructional technology program, and each high school excluding Woodside receives an allocation to release a teacher from 20% of his/her contract. The release is roughly equivalent to a course section. The teachers are assigned to provide on-site technology integration support. The released teachers meet monthly with the director of instructional technology and the instructional technology specialist to discuss common support needs and current projects. The stipended teachers focus on supporting the implementation of the learning management system, Canvas.

The instructional technology director reported struggling to perform the duties involved in ongoing technology infrastructure upgrades, facilities projects, the daily operations of the Technology and Information Services Department, and other assignments. The competing priorities leave insufficient time to focus on strategic instructional technology planning. The partial reassignment of the instructional technology specialist to support assessment further reduced capacity in the department. School sites agreed that instructional technology support was inadequate. They indicated that the district provided responsive and effective support to use new software programs like Canvas; however, they expressed concern that instructional strategies and learning activities remained unchanged, even with widespread increases in the number of student devices, because of a lack of training. The instructional technology director and instructional support specialist had the same concerns. Since schools have significant independence in decision-making and different levels of access to technology, creating and implementing a cohesive instructional technology program is difficult.

Implementing technology with insufficient professional learning and support hinders adoption, and ultimately, reduces the value of the district's technology investments. When support is limited or unavailable, teachers are less likely to try innovative practices in the classroom. The lack of a full-time, dedicated instructional technology support specialist contributes to a culture where technology remains isolated from curriculum. Strong technology programs include frequent professional learning and integration into curriculum in all content areas.

Many districts have an instructional technology director position reporting to the CTO. The director leads instructional technology planning, collaboration with the curriculum department, and professional learning. The instructional technology director has subordinate staff, including at least one full-time instructional technology specialist who provides coaching and professional learning to support district teaching and learning goals. Software support for instructional technology programs is provided through a centralized technology help desk, and centralized staff are often augmented by released teachers at high schools. The best practices include partially releasing a teacher in each core content area to provide contextual support for instructional technology.

Recommendations

The district should:

1. Develop a clear organizational structure for the Instructional Technology team that meets district needs. The suggested structure is as follows:
 - Instructional technology director (Reports to the CTO)
 - Instructional technology specialist (1 position)
 - Site-based technology coaches - Assigned based on content area (.8 - 1.0 full-time-equivalent position per school site, 4-5 total)
2. Integrate technology-based instructional practices in content-area professional learning through partnerships between the Instructional Technology and the Educational Services Division.

Instructional Technology Specialist

The district has one instructional technology specialist in the department. The title of the instructional technology specialist position, according to the job description is “resource teacher: CCSS technology specialist.” The job description outlines responsibilities including leadership, planning, staff development and support for the integration of technology into teaching and learning. The document requires incumbents to do this work with emphasis on the Common Core State Standards (CCSS). Job duties include providing individual support and more strategic, districtwide staff development. The role is assigned to assist in the development and implementation of the technology plan and is responsible for researching and selecting innovative technology and appropriate educational software for the district and individual schools.

During the FCMAT study team’s interviews, the incumbent instructional technology specialist indicated that the position was recently altered to support the implementation of a new assessment platform. The instructional technology specialist is 60% dedicated to educational technology and 40% to assessment. The position is funded on a temporary, year-to-year basis, and the incumbent tries to schedule a block of time at each site during the week. At the sites, she works with staff through both prescheduled appointments and drop-in visits. The instructional technology specialist reported that most of the support requests are questions about how to perform functions on districtwide software. Support requests related to changing instructional practices, involving students, or applying new technologies are infrequent. The incumbent had similar concerns related to her role on assessment. Support requests most often relate to how to use the system, broader discussions about best practices in assessment design and interpreting assessment data are rare.

The instructional technology specialist coordinates a group of partially released and stipended coaches at schools. The site-based coaches provide direct support to teachers on district initiatives and presently focus on the ongoing implementation of the learning management system, Canvas. The instructional technology specialist meets with the coaches monthly as part of the Technology Integration Council and also supports the current technology plan development effort.

Although the department is structured under the Educational Services Division, the instructional technology specialist reported little coordination between technology-based professional learning and instructional staff professional learning. As a result, technology is not frequently and meaningfully integrated into content-area professional learning. The incumbent stated that instructional staff want to integrate technology into staff development, but time constraints and competing initiatives have hindered this effort. Both the instructional technology specialist and the director of instructional technology indicated that a recent 1-to-1 device implementation and the associated training for the Advancement via Individual Determination (AVID) program was a promising counterexample to this norm. The AVID training focused on effective instructional strategies in maximizing technology in the context of student needs.

The district has invested in infrastructure upgrades, additional student devices, a new learning management system and a new assessment system. To involve students and improve learning, teachers require professional learning and support to change instructional practice. The split focus of the instructional technology specialist position between assessment and educational technology detracts from the district's ability to maximize these new technologies. The job description omits responsibilities related to coaching and curricular design critical to instructional technology implementation.

Many school districts of similar size have a director or coordinator of instructional technology and at least one full-time teacher on special assignment position. Within that organizational structure, the teacher on special assignment focuses on professional learning and coaching to support technology integration. Questions related to the use of software programs are assigned to appropriate software support specialists. Assessment implementations are often accompanied by the temporary addition of at least one full-time staff member who can help develop common assessments for each content area and guide the use of assessment data and other evidence in adjusting instructional approaches. Combining the two roles into a single position puts both instruction

Recommendations

The district should:

1. Revise the resource teacher: CCSS technology specialist job description to align with the working title of instructional technology specialist and include duties related to instructional design, coaching, and working with educational services staff to embed technology in content-area training.
2. Create a new assessment resource teacher position in the Educational Services Division, or reassign assessment responsibilities to other staff in educational services.
3. Dedicate ongoing funding to the instructional technology specialist position.

4. Direct questions about how to use district-adopted software programs to a centralized help desk or information services team. Provide appropriate training to support the team as needed.
5. Develop a plan to integrate technology-based activities into content-area professional learning developed by curriculum staff, supported by the instructional technology specialist.

Information Services

The information services manager leads the Information Services team, which includes one information services specialist III, one information services specialist II, and one information specialist I. The department also coordinates state and federal reporting duties of site-based guidance specialists and department-integrated student information systems specialists. All the information services specialists report directly to the information services manager. Additionally, the programmer/web services manager assists the Information Services team on complex software implementation and data integration projects.

During fieldwork, staff emphasized the Information Services team's role in state reporting, including the California Longitudinal Pupil Achievement Data System (CALPADS). Information Services staff described frustration with frequent, repeated data entry errors originated by school sites and departments. The information services manager reported that each of the three information services staff spend up to 60% of their time querying, correcting and submitting CALPADS data. When approaching report submission deadlines, Information Services staff reported being directed by the information services manager to not answer none-emergency support calls.

As discussed in greater detail in the Help Desk section of this report, the Information Services team receives requests for support through a dedicated email address (icsupport) phone calls, 2-way radios and verbally. The email address is monitored by one of the information services specialists. The team supports district-adopted student data systems, including the student information system (Infinite Campus) and learning management system (Canvas). The information services manager also supports high-priority specialized software programs. School site staff indicated they are dissatisfied that they cannot get timely responses from the Information Services support team during CALPADS reporting windows. Information Services staff reported inconsistent standards for resolving support inquiries. One staff member reported that turnaround times for typical tickets are three to four days. Another staff member stated that the management team expects tickets to be resolved within 24 hours, but the icsupport request system does not provide usable data to monitor the responsiveness or quality of support.

The Information Services team meets at least weekly to discuss ongoing tasks and upcoming projects. Information Services projects are generally not included on the master project list provided to the FCMAT study team by the director of instructional technology. The information services manager reported keeping a separate project list. Staff stated they had heard of the document, but did not have access to it. Limited technical and training documentation exists for staff to reference.

The job descriptions for the information services specialists I-III are combined in a single document, and this shared description does not define differences in the levels of duties or the skill required of the three levels in this classification series. Staff were unclear on how the levels were

determined or how incumbents can progress within the classification series. The information services manager and staff both assume that level placement is related to historical roles and longevity in the district. The manager distributes assignments based on perceived staff capacity, aiming for equitable workloads, and this has led to some more technical, potentially higher-level work to be assigned to information services specialist II or taken on by the manager himself. Without defined roles and expectations, targeting training and staff development is difficult. The information services manager reported providing structured query language (SQL) training for all incumbents in the information services support series. SQL is a programming language that allows technical staff to efficiently extract, analyze, and update data in software databases. Information Services staff were divided in their evaluation of the training. One staff member found the training interesting, but irrelevant to current responsibilities, and another indicated it was repetitive of previous learning opportunities. A third staff member felt that the training requirement was arbitrary.

The information services manager acts simultaneously as a technical lead and a supervisor to the information services team. Staff described several cases where the manager was the only member of the team involved in a large software implementation. For technically complex projects, information services staff reported relying on the programmer/web services manager for assistance. The programmer/web services manager reports to the director of instructional technology. The segmentation of programming from the information services team leads to conflicting priorities and contributes to the project management and technology planning issues discussed earlier in this report.

An ill-defined organizational structure and work assignments can lead to delays in support, friction between team members, and confusion related to individual responsibilities. Lack of adequate systems and project documentation compounds these issues. Unclear procedures can lead to reactive approaches to recurrent processes like student enrollment, new school-year preparations, and data cleanup for state reporting. Ultimately, the absence of clear roles and procedures results in uneven and unreliable school site and department support.

Many school districts adopt job descriptions that differentiate the expectations of incumbents at each level of the classification series. With the rapid growth in CALPADS reporting requirements, many districts similar in size to Sequoia Unified dedicate a position to coordinating required reporting. Separating the demands of CALPADS from the district's day-to-day operational needs fosters consistent support for school sites. Districts often support that position with a cross-functional reporting or data governance team to monitor data integrity and ensure active participation from schools and departments in the review and submission of CALPADS. Additionally, a dedicated reporting resource has greater visibility into overlapping data integrity issues and can create more proactive processes for governing data. Some districts also have a dedicated programmer/database administrator role in the Information Services Department to lead data integration and other complex programming or analytical work. This position is a nonmanagement, technical lead that is part of the department.

Recommendations

The district should:

1. Restructure the Information Services group to better support the needs of the district, including balancing the demands of required governmental reporting with district support.

2. Create a central, shared repository for project information, systems documentation and training resources. Prioritize development of documentation related to CALPADS reporting and school enrollment procedures.
3. Establish a cross-functional data governance team to handle the data integrity issues affecting state and federal reporting.
4. Consider reclassifying the programmer/web services manager position as a programmer/database administrator position and restructuring the position under Information Services.

Information Services Manager

The Technology and Information Services Department has one information services manager position. The job description for the information services manager is unclear on the position's reporting structure. In the administrative relationship section of the job description, the position is defined as reporting to the assistant superintendent, administrative services. However, in the body of the job description, the information services manager position is described as reporting to the director of information technology. The job description characterizes the position as a SQL database administrator with responsibilities to direct, manage, and evaluate the work of Information Services Department staff. Duties outlined include overseeing the student records system, establishing and maintaining procedures and processing schedules, and ensuring accurate and timely data reporting. The job description includes both broad statements of duties and references to specific software (Communicado) and statistical tools (SASI XP).

During the FCMAT fieldwork, the incumbent information services manager described spending 80% of his time managing projects and 20% supporting the day-to-day district operations. The incumbent described his typical duties as verifying critical systems are running, creating and modifying student system reports, reviewing and correcting state reporting data, communicating with site-based staff responsible for data entry, and checking in with Information Services team staff. Information Services staff confirmed these responsibility areas and expanded on the information services manager's technical role. Staff indicated that this manager takes on new data integration and software implementation projects himself or works with the programmer/web services manager outside of Information Services. Complex data extraction and loading processes, including those required for the district's recent assessment platform (SchoolCity) and English learner software (Elevation) adoptions, were developed and are supported primarily by the information services manager. The incumbent reported that his role is limited to supporting student systems. Information Services rarely engages in business or operational data systems in use at the district. The incumbent and staff stated that the director of instructional technology conducts staff evaluations although the information services manager provides input.

The information services manager is a combined technical and managerial position as described in the job description. The district recently implemented a new learning management system (Canvas), a new assessment platform (SchoolCity), and an English learner data system (Elevate). Current and planned curriculum adoptions include online software components that are dependent on integration with the student system. Developing, testing, implementing, and maintaining these systems and their integrations is technically complex and time-consuming work. The continuing growth in the technical workload of this position contributes to gaps in the managerial needs of the Information Services team. Consistent support standards, technical documentation, project management resources, and cross-training on key systems do not exist.

Data integrity and system issues persist without time and resources to document, provide training, and monitor the health of systems critical to state reporting.

Many districts of similar size have an information systems manager position and a separate database administrator or lead programmer position. The database administrator is responsible for maintaining essential student, operational, and curricular systems. This role develops and maintains integrations between systems, creates complex queries and reports, and oversees security and health of district data. Districts establish a dedicated management position to lead an information services team. Without the competing technical responsibilities, the manager focuses on data governance, project management, coordinating support, business continuity (including backup and recovery of systems) and staff development and performance.

Recommendations

The district should:

1. Revise the information services manager job description to accurately reflect the reporting structure, reduce direct technical responsibilities, and eliminate references to specific software programs. A sample job description is attached as part of Appendix A to this report.
2. Create a non-management, programmer/database administrator job description reporting to the information services manager.
3. Reassign responsibility for Information Services staff evaluations to the information services manager. Provide leadership support and training as needed for the managerial aspects of the information services manager role.

Information Services Specialist III

There is one information services specialist III position in the Technology and Information Services Department.

The information services specialist III position shares a job description with the technology maintenance specialists I, II, and III and the information services specialists I and II. The job description distinguishes the information services specialist classifications as supporting student data systems. Job duties include providing end-user support, managing student data, and preparing data for governmental reporting requirements. The job description does not mention support for business, operational, or curricular software systems. The position reports to the information systems manager.

During staff interviews, the incumbent stated that he focuses on state reporting. The information services specialist III extracts data from the student information system and prepares the information for upload into CALPADS. The incumbent focuses on program-related data for state reporting. Additionally, the incumbent reported being the primary monitor for the Information Services team's shared support email, icsupport. The incumbent described concerns about not having enough training and support for his role and stated that he struggled to support new software programs adopted by the district, including Canvas, because of limited training and documentation. He attributed some delays in support to programs, including the human resources system and Canvas, that do not integrate well with the student information system. School site interviews confirmed delays in the setup and availability of accounts for newly hired teachers as well as growing teacher frustration with issues integrating Canvas with the student information

system. The incumbent reports to the information services manager; however, his evaluation was completed by the director of instructional technology.

The job description combines two distinct series of classifications. The information services specialist definition and description of duties do not distinguish between the I, II, and III levels of the position. When asked how levels are distinguished in work assignments, incumbents emphasized longevity at the district and historical organization structures as the primary rationale. When the distinction between the levels of a position are not tied to specific skills and performance expectations, staff may be unclear about roles and career pathways. Managers may assign responsibilities without consideration for the appropriateness of the task for the employee's classification or training and experience.

Information Services Specialist II

The department has one information services specialist II. The position is included in the combined job descriptions for the technology maintenance specialist and information services specialist classifications. Information services specialists support the district's student data systems, including associated reporting and scheduling tasks. According to the job description, the position reports to the director of instructional technology.

During interviews, the incumbent stated that he spends most of his time on CALPADS reporting. The information services specialist II coordinates data clean up, extraction and submission of state reports related to special education, migrant students, and free-and-reduced-meal program eligibility and participation. Consistent with his colleagues in Information Services, the information services specialist II reported that the most time-consuming aspect of his work is data clean up. He expressed frustration with repeated data entry errors at school sites and poor communication from vendors. The incumbent indicated that the information services manager takes the lead on most technical work on new projects. Communication with the team on new software implementation projects, generally occurs after a product has been selected. The incumbent had significant involvement in the transition from the district's former learning management system, School Loop, to Canvas. He was assigned to support the project's configuration and data integration efforts, and after the Canvas implementation, the incumbent became the primary technical support for the system. The incumbent stated that the Canvas implementation increased the number of tickets coming into the icsupport email. The incumbent indicated that the delineation between his position and the other information services specialists is unclear, and each completes similar work. The incumbent reports to the information services manager. The information services manager distributes work between team members, but individual team members prioritize their own day-to-day tasks. The director of instructional technology evaluated the information services specialist II with input from the information services manager.

The job description combines two distinct series of classifications, and the information services specialist definition and description of duties do not distinguish between the I, II, and III levels. The position's focus on student systems support and state reporting aligns with the current job description; however, the job description does not distinguish the expectations related to autonomy, decision-making, and technical skill required at each level of the classification. Incumbents report spending most of their time on data clean up in preparation for CALPADS submissions. The amount of time spent correcting repeated errors in data entry consumes time that could be spent on more strategic tasks and support efforts.

Information Services Specialist I

The department has one information services specialist I, which is included in the combined job descriptions for the technology maintenance specialist and information services specialist classifications. Information services specialists support the district's student data systems, including associated reporting and scheduling tasks. According to the job description, the position reports to the director of instructional technology.

During the FCMAT study team's fieldwork, the incumbent in the information services specialist I position outlined responsibilities related to school operations. The incumbent provides direct support to school guidance specialists and clerks and assists school personnel by building bell schedules, preparing report cards and truancy letters for mailing to families, and setting up automated attendance calls. The incumbent also indicated that she manually enters all new enrollment information into the student information system. The information specialist I, like the other incumbents in Information Services, described continuous efforts to clean up and prepare data for state reporting.

The combined job description for the information services specialist position broadly defines duties related to supporting student data systems and state reporting. The absence of defined distinguishing characteristics between the levels I, II, and III may lead to confusion and overlap in the incumbents' roles. The current structure promotes one-size-fits-all trainings for a team whose current technical proficiency and daily tasks vary. Lack of clear ownership of support requests and systems leads to inconsistent support for school site requests. The emphasis on state reporting for all information services specialists exacerbates the gaps in school site support.

Many districts adopt individual job descriptions clearly delineating the responsibilities and skills required of each level of the classification. These include defining the distinguishing characteristics, including the level of independence, technical skill, and complexity of work. Job descriptions for technical positions, including information services specialist should avoid naming specific technologies. With differentiated job descriptions, managers can assign tasks and responsibilities in alignment with the level of the position, rather than the perceived capacity of the incumbent. Many districts assign one to two positions to focus on state reporting, with the remaining staff focused on other Information Services projects and school site and department support. Information Services staff in other organizations support the student data systems, online curricular software, and operational and business systems.

To clarify the areas of responsibilities of each of the three information services specialist (I, II, and III) positions, the positions should be reclassified as software support specialists and new job descriptions should be adopted. Samples of these job descriptions are attached as Appendix A to this report.

Recommendations

The district should:

1. Develop a software support specialist I- III series of job descriptions. Sample job descriptions are included in Appendix A, which is attached to this report.
2. Reclassify current information services specialist I-III positions to software support specialist positions I-III based on their qualifications and needs of the district.

3. Consider creating an additional software support specialist II position. Focus one software support specialist II position on state and federal reporting. The second position's primary responsibilities should include direct school support and internal district reporting needs.
4. Document responsibilities and technical skills required of each incumbent software support specialist and provide aligned training.

Student Information Systems Specialist

There is one student information systems specialist in the district in the Special Education department.

The job description for this position combines data analysis, record keeping, document preparation, and general administrative responsibilities. The document distinguishes the position from other clerical classifications by requiring more technical or specialized knowledge and the performance of complex tasks. The specific duties outlined by the job description emphasize support for the district's Special Education Information System (SEIS) and required reporting of special education data. The position reports to the director, special education,

During the FCMAT study team visit, the position incumbent confirmed responsibilities that align with the job description and reported providing support for SEIS to both special education and school site staff. She also stated that she works closely with Information Services to reconcile data between SEIS and the student information system, Infinite Campus. The student information specialist has struggled with recent issues involving accuracy and completeness of the state reports. The incumbent reported spending an increasing amount of time managing nonpublic school contracts and billing for the Special Education Department. Discrepancies between how SEIS and Infinite Campus categorize and drop students has created significant issues in preparing data for district and state reports. The incumbent receives SEIS support requests via email and phone call, but she does not have access to the current technology work order system or Information Services support email. The position reports to the executive director, special education and meets regularly with the Information Services to coordinate special education data reporting and integration needs. During interviews, FCMAT learned that a similar, parallel position supports English learner programs, reporting to the director of English learner special programs; however, that position is classified as a senior office assistant.

The incumbent in the student information systems specialist position stated that other obligations, including contract management, have interfered with her ability to provide immediate SEIS support and proactively resolve data issues. Additionally, inconsistencies between SEIS and the student information system create delays in preparing and finalizing state reports. Although the incumbent collaborates closely with Information Services, the exclusion of SEIS and special education software support from the work order system may result in confusion and frustration from teachers seeking help. Combining the responsibilities of this position with other clerical tasks ultimately may leave little room to focus on data required for accurate reporting. The existence of a parallel worker handling English learner programs in a different classification may lead to concerns about inequities in assignments and confusion about position requirements.

Many districts either assign SEIS support to the information services team or provide a dotted-line report structure to the information services manager for data-focused staff in other departments. Districts also implement a universal work order system that allows routing assigned

tickets to appropriate resources inside and outside the department. As special education student populations and reporting requirements grow, districts often dedicate a position to data reporting and records management. Contract and billing roles should be distributed to other administrative staff.

Recommendations

The district should:

1. Evaluate the senior office assistant position supporting English language learning programs to determine if it is similar in scope and responsibilities to the student information systems specialist position. Either consider reclassifying the position or clarifying distinguishing position characteristics.
2. Consider restructuring the student information systems specialist position under the information services manager.
3. Incorporate the student information systems specialist, and support of SEIS, into the technology work order system to provide teachers a single place for technology support.
4. Consider reassigning some administrative and contract-related duties of the student information systems specialist position to other administrative staff.

Programming, Web and Server Services

The programmer/web services manager leads the Programming, Web and Server Services team. The team includes a single technology maintenance specialist III position, and the organizational chart shows the technology maintenance specialist III position as reporting directly to the programmer/web services manager.

Two incumbents on this team perform specialized technical tasks, dividing their time between supporting the work of the Data and Voice Services team and the Information Services team. The programmer/web services manager functions as a database administrator and programmer. He works closely with the Information Services team on new software implementations and integrating distinct data sources. The technology maintenance specialist III position works more closely with the Data and Voice Services team. His responsibilities include managing the district's firewall, identity management systems, and other network appliances. The technical maintenance specialist III generally takes direction from the instructional technology director and the data and voice services manager.

The inconsistency between the documented organizational structure and practice in the Programming, Web and Server Services Team is problematic. Without a clear supervisory structure and defined priorities, the work of staff may not be aligned to the department's needs. The technology maintenance specialist III position predominately and frequently takes direction and assignments from a manager who does not have supervisory authority over him, which may lead to substantial conflict on the team.

Many districts similar in size to the Sequoia Unified High School District structure their technology departments to include two technical divisions, including information services and technical support. Programming, database administration, and data integration activities are assigned

to the information services team, and security and identity management are assigned to a systems administrator on the technical support team. These districts clearly articulate supervisory relationships within the organization chart.

Recommendations

The district should:

1. Eliminate the Programming, Web and Server Services group, consolidating existing roles into the appropriate teams as described below.
2. Rename the Data and Voice Services group to Technical Support (described in detail in the next section of this report).
3. Reclassify the programmer/web services manager position to a non-management titled programmer/database administrator position and restructure the position under Information Services.

Programmer, Web and Server Services Manager

There is one programmer/web services manager position that reports to the director of instructional technology. The job description states that incumbents are to provide technology consulting, solutions, and support to school and district personnel to improve student learning and to promote teacher and administrator effectiveness. It also states that the position reports to the assistant superintendent, administrative services.

During the FCMAT fieldwork, the incumbent in this position stated his responsibility is to perform the programming and data integration work needed by the district office and school sites. Those responsibilities include writing code, handling complex Structured Query Language (SQL) queries, importing financial data from the county office, training other staff on how to perform SQL queries and running the databases and servers for the district. The incumbent reports this position works closely with the Information Services staff providing support for student program needs.

The organizational chart provided to FCMAT shows this as a management-level position with one technology maintenance specialist III reporting to it. The incumbent programmer/web services manager stated that the technology maintenance specialist III was last evaluated by the director of instructional technology with input from the data and voice services manager. The incumbent reports the technology maintenance specialist III tasks and responsibilities align more with the Data and Voice Services staff.

Many school districts of similar size establish a nonmanagement programming and database administration position to meet district needs. In the past, many school districts used the programming position to primarily support the business needs of the district, but with the increasing use of data and systems to support student programs the workload has shifted. Online components to curriculum and other data systems that rely on connections to the student information system have increased the need for districts to retain staff that have expertise in integrating disparate systems. Many school districts are seeing a higher percentage of programming time used to support student programs. Districts generally structure the programming and database administration position under Information Services.

Recommendations

The district should:

1. Reclassify the programmer/web services manager position as a nonmanagement position titled programmer/database administrator and restructure the position under Information Services.
2. Update the job description to focus on programming, database administration, data integration and data governance.

Technology Maintenance Specialist III

The Programming, Web and Server Services group has one technology maintenance specialist III position.

The job description for the technology maintenance specialist and information services specialist I-II-III covers two major classifications. The section covering the technology maintenance specialist states the incumbents are to install, configure, repair, and maintain computing devices and their peripherals, networks, telecommunications, video surveillance equipment, and related office and instructional equipment. The position reports to the director of instructional technology.

During the FCMAT fieldwork, the incumbent indicated that his position supports core network security, monitoring and identity management systems in the district. He reported responsibilities that include administering the network firewall and traffic flow, the district's Microsoft Windows domain, Domain Name Servers (DNS) and local file shares. The incumbent also responds to district office help desk tickets but does not normally go out to school sites. On the organizational chart, the incumbent reports to the programmer, web and server services manager. However, his work more closely aligns with the work of the Data and Voice Services team. The incumbent was most recently evaluated by the instructional technology director, with input from the data and voice services manager.

The current job description is broad and does not differentiate between levels. It is unclear what determines the level where a staff member is placed or the tasks for which a specific level is responsible. The incumbent in this technology maintenance specialist III performs tasks that are different from those of the other technology maintenance specialist IIIs in the department, and the technical skill and level of responsibility of this position is substantially higher than that of the parallel positions. When the job description does not clearly define the responsibilities and tasks of a specific classification level, staff may have difficulty in determining what they are responsible for and may lead to assignment confusion and duplication of effort.

The title of technology maintenance specialist III and the current job description do not accurately reflect the duties and responsibilities of this position. The responsibilities more closely align with that of a systems analyst.

Many districts adopt job descriptions clearly defining each position and its levels. Each level of the job description clearly defines the tasks, responsibilities and qualifications for that level. They then open a specific number of positions within each level based on the district needs. Districts create a systems analyst position in technical support to oversee district security equipment, including the firewall, and domain and user account management systems. A dedicated systems analyst position improves the district's oversight and planning for cybersecurity and network reliability.

Recommendations

The district should:

1. Develop a systems analyst job description. Sample job descriptions are included in Appendix A.
2. Reclassify the technology maintenance specialist III position to systems analyst reporting to the technical support manager (position described in greater detail in next section).

Data and Voice Services

The data and voice services manager leads the Data and Voice Services group, which includes three technology maintenance specialist III positions and one technology maintenance specialist I position. The organizational chart shows these positions directly report to the data and voice services manager. The organizational chart also shows the site technology managers, but it does not indicate where they report. The district also has a position of site technology assistant that is not included on the organizational chart provided to FCMAT.

Staff indicate they are sometimes unclear to whom they should report. They may receive work priorities from several individuals, but receive their evaluation from a position that is different from one shown on the organizational chart. As discussed elsewhere in this report, the current job descriptions for some positions may show they report to a position that is different from those the organizational chart indicates. Staff are sometimes unsure about their priorities because they have received different priorities from two different administrative positions for the same day. As a result, they try to meet both sets of priorities. School site staff report they receive strong support from the technical staff, but need more.

When the organizational structure is not clearly defined and communicated to all staff, it may be difficult for staff to efficiently meet the technology support needs of the district and school sites. This may lead to confusion within the department, reduce efficiency, and cause work to be performed by the wrong staff member. As a result, school sites may believe they need additional technology support instead of improved efficiency.

Many school districts establish a clear organizational structure and ensure job descriptions match the organizational chart. This provides staff a clear understanding of who can assist them in setting priorities when working on multiple projects. Districts typically have an organizational structure that clearly delineates between technical support, information services (database and software support), and instructional technology. In this design, technical support includes network management, systems administration, and on-site and remote technical support.

Recommendation

The district should:

1. Rename the Data and Voice Services group to Technical Support.

Data and Voice Services Manager

The Technology and Information Services Department has one data and voice services manager position.

The job description for the data and voice services manager states incumbents are to manage resources and perform technical duties related to the maintenance and operations of district local area network (LAN), wide area network (WAN), telephone, messaging and communications systems. The job description also states that the position reports to the assistant superintendent, administrative services.

During fieldwork, the incumbent in the data and voice services manager position stated responsibilities include network infrastructure, wired and wireless infrastructure, site routers and switches, network monitoring, shared server management, phone system, district radio communications system, managing staff, and E-Rate filings. E-Rate is a federal discount program administered by the Universal Service Administrative Company (USAC) Schools and Libraries Division (SLD) that provides discounts to schools and libraries for eligible services. The incumbent stated responsibilities also include evaluation of assigned staff, but the evaluations are performed jointly with the director of instructional technology.

This is a highly technical position and can be demanding on one staff member in a school district with multiple sites. Adding the responsibilities of managing and evaluating staff creates a large workload and may cause the technical aspects of the position to be neglected. The position's technical requirements will require the staff member to research products, stay current on new and emerging technologies and continually monitor the network. When the workload is too high, the network monitoring and research on new and emerging technologies will generally suffer.

Many large school districts have a similar network position with responsibilities that include administering both the LAN and WAN and managing all networking devices. This position is often referred to as a network analyst. The scope of responsibilities for the position will include maintaining, troubleshooting, and proactive planning related to the firewall, routers, switches and wired and wireless infrastructure throughout the district. Because of the technical demands of the position, many districts do not include managing or evaluating staff, allowing the staff member to focus on the technical needs of the district and school sites.

To accommodate the growth of this group (as described in the following section) a technical support manager position should be created to provide technical resources, training, oversight and evaluation of staff.

Recommendations

The district should:

1. Develop a network analyst job description. Sample job descriptions are included in Appendix A.
2. Reclassify the data and voice services manager position as network analyst reporting to the technical support manager.
3. Create a technical support manager position reporting to the chief technology officer. A sample job description is attached as part of Appendix A to this report.

Technology Maintenance Specialist I

The Data and Voice Services group has one technology maintenance specialist I position.

The current job description for the technology maintenance specialist/information services specialist I-II-III covers two major classifications. The section covering the technology maintenance specialist states the incumbents are to install, configure, repair, and maintain computing devices and their peripherals, networks, telecommunications, video surveillance equipment, and related office and instructional equipment. The position reports to the director of instructional technology.

During fieldwork, the incumbent stated his responsibilities varied and indicated the primary ones are to take care of the video surveillance system, including training other staff on the use of the system, assisting with the phone system, working on special projects such as installation of wireless access points (WAPs) and responding to support requests. He also responds to support requests for assigned school sites. The duties include working on user technology, phones, school marquee, sound system as well as classroom and administration technology.

The job description is broad and does not differentiate between levels. It unclear what determines the level where a staff member is placed or the tasks for which that specific level is responsible. The incumbent stated they believe the difference in levels is determined by the level of independence in the completion of tasks.

Technology Maintenance Specialist III

The Data and Voice Services group has three technology maintenance specialist III positions.

The job description for technology maintenance specialist/information services specialist I-II-III covers two major classifications. The section covering the technology maintenance specialist states the incumbents are to install, configure, repair, and maintain computing devices and their peripherals, networks, telecommunications, video surveillance equipment, and related office and instructional equipment. The position reports to the director of instructional technology.

During fieldwork, the incumbents stated their responsibilities vary based on current district needs, but they did not have a clear definition of tasks for which they are consistently responsible. The three incumbents report responsibilities include primary support for specific systems such as video surveillance, wireless network, audiovisual design and implementation and station wiring. In addition, they respond to help desk tickets and support site-level technicians with more complex issues and when additional help is needed. They also stated they are sometimes unclear on their responsibilities and help where they were needed.

The job description is broad and does not differentiate between levels. It is unclear how a staff member's level is determined or the tasks of that specific level. The three technology maintenance specialists IIIs in the Data and Voice Services team perform similar types of tasks with similar levels of responsibility. One of these technology maintenance specialists should be reclassified as a technology support specialist IV in order to provide higher level of assistance to all other TSS staff and to the other staff in the Technical Support group. The technology maintenance specialist III in the Programming, Web and Server Services team performs tasks that require an increased level of skill and responsibility. When the job description does not clearly define the responsibilities and tasks of a specific classification level staff may have difficulty in determining their responsibilities, which may lead to assignment confusion and duplication of effort.

Many districts adopt job descriptions clearly defining each position and its levels. Each level of the job description clearly defines the tasks, responsibilities and qualifications for that level. They then

open a specific number of positions within each level of that position based on district needs. Often this position is called a technology support specialist X where X is the level of the position.

Recommendations

The district should:

1. Develop a technology support specialist I-IV series of job descriptions position. Sample job descriptions are included in Appendix A, which is attached to this report.
2. Develop a systems analyst job description. Sample job descriptions are also included in Appendix A.
3. Reclassify one technology maintenance specialist III position to technology support specialist IV based upon skill levels.
4. Reclassify two technology maintenance specialist III positions to technology support specialist III based upon skill levels.
5. Reclassify the technology maintenance specialist I position to the appropriate technology support specialist level based on qualifications and district needs. (For purposes of a proposed organizational chart, this position has been placed as a technology support specialist II).

Site Technology Managers

The department has 5 FTE site technology manager positions. These positions are located at Carlmont (1), Menlo-Atherton (1), Sequoia (1), and Woodside (2). The job description for the site technology manager states incumbents are to oversee and supervise the planning, installation and continuing operation of software, hardware, network, security, and databases at a school site. The position reports to the instructional vice principal.

The incumbents stated their responsibilities varied based on the site needs, and they are the first line technology support for users. This may include repairing equipment, installing new equipment, working on audiovisual equipment, providing support for the phone system and checking out Chromebooks to students. They stated they are also responsible for ordering equipment and parts needed at the site. Several of the site technology managers stated they did not work on the network or the servers other than to assist district office staff for their site. The incumbents stated the increase in the number of Chromebooks in the classrooms has added significantly to their workload. Their workload is prioritized by the site administrator, but they also receive priorities from the district office management staff. The incumbents may coordinate some of the work done by the site technology assistant. The site technology managers meet monthly with the instructional technology director and Data and Voice Services team to discuss upcoming projects and technology changes that impact the school sites.

The job description covers a management-level position, but the site technology manager does not evaluate any staff or perform any other management duties. The work performed by the incumbents is technical and provides direct support to the users. Site administrators distinguished the site technology manager positions from the site technology assistant positions based on the complexity of the technical work and purchasing planning tasks performed by the incumbents. The technology manager position is similar to that of a technology support specialist II.

Many districts with multiple sites have technicians assigned to each site, and the quantity of technicians is based on the need of each site. Many districts use the data from a full featured help desk system to assist in determining the staffing needs at each site. The technician works closely with a site administrator to make sure they are setting priorities that meets the needs of the site. Site-assigned technicians are members of the district technology team and report to the manager of technical support.

Recommendations

The district should:

1. Reclassify the site technology manager positions as technology support specialist II. Sample job descriptions are included in Appendix A.
2. Consider restructuring the technology support specialist II positions under the technical support manager position to facilitate consistent training, supervision, and expectations for site-assigned technicians.

Site Technology Assistant

School site and district staff report some site technology assistants support individual school sites. These positions are funded by each site, report to a site administrator and are used as additional technology support to augment the work of the site technology manager. The district did not provide a job description for the site technology assistant. The FTE available at each site is unclear. School sites reported using parent donations and school site general fund dollars to fund these positions. Funding, and the resulting level of support, may vary from year to year based on available resources.

During fieldwork, the incumbents indicated their responsibilities include basic support for user computers, printers, Chromebooks and audiovisual equipment. They reported they do not take care of any networking devices like routers, switches or wireless devices other than assist in installing hardware when asked. Although most of their work is based on the tickets they receive, they also respond to verbal requests from the site.

Other districts establish consistent allocations for technical support based on criteria, including school enrollment, campus size, number of devices, and the type of technology program. Technology support at the site often includes a senior or more technical position (similar to the proposed technical support specialist II) and a first-tier support position similar to the current site technology assistant model in place. This first-tier position provides basic repair and installation of computers, Chromebooks and printers for users. Many school districts find these positions useful and cost-effective. The technician works closely with a site administrator to ensure they establish priorities that meets site needs. These technicians are typically members of the district technology team and report to the technical support manager.

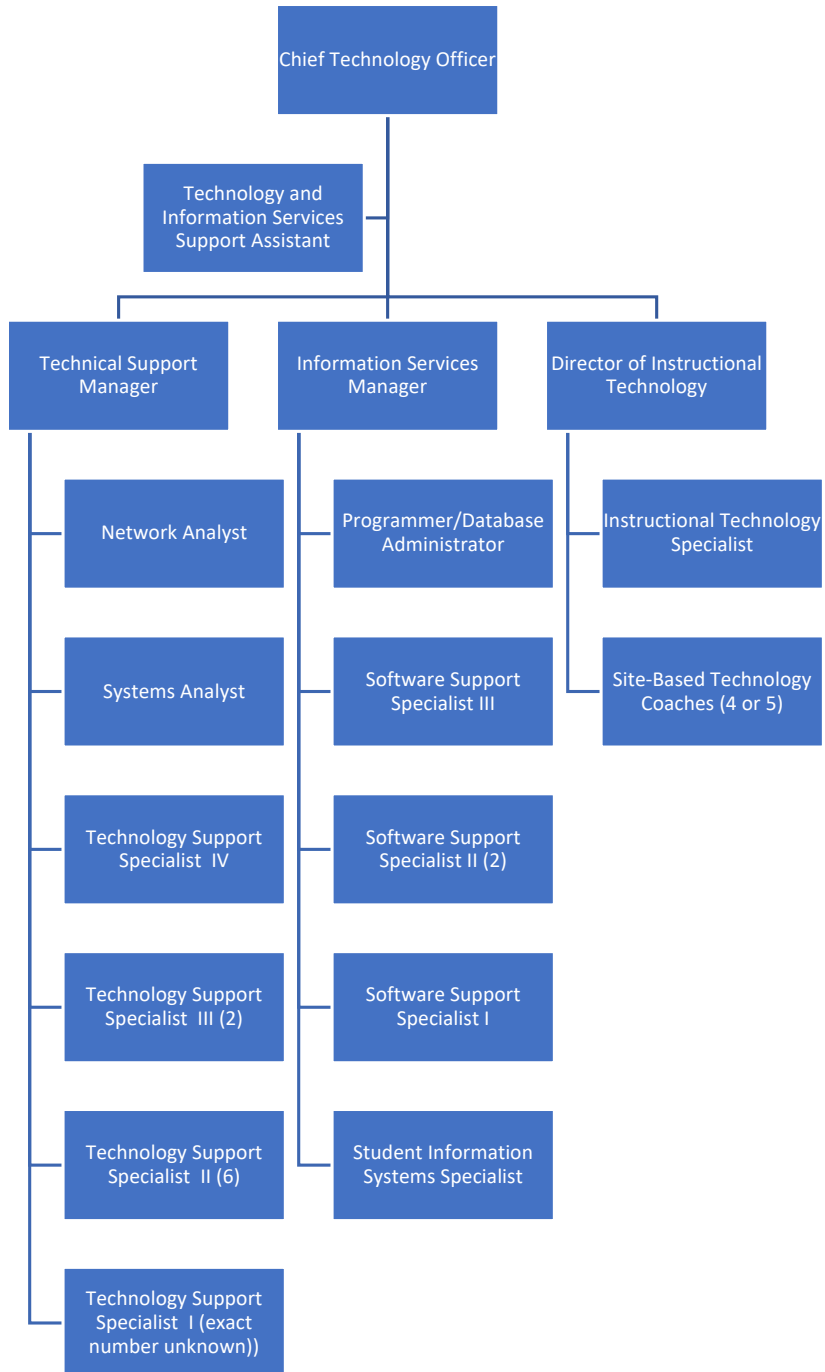
Recommendation

The district should:

1. Reclassify the site technology assistant positions as technology support specialist I. Sample job descriptions are attached as part of Appendix A to this report.

The proposed departmental organizational chart is presented below:

Proposed Organizational Chart



Appendices

Appendix A - Sample Job Descriptions

	POSITION DESCRIPTION
Title: Chief Technology Officer	
Department: Information Technology	FLSA Classification: Exempt
Bargaining Unit: None	Work Year: 12 Month
Reports to: Superintendent	Board Approval Date: 7/10/2013

Salary Grade: Range 15 –Unscheduled Management Salary Schedule

Primary Function:

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 Job Functions include, but are not limited to the following:

1. Works collaboratively with schools and departments to support technology integration and innovation. Identifies and supports instructional applications for technology.
2. Provides oversight and direction for integrated data communications networks and the use of integrated database management systems.
3. Plans, schedules and directs the development of computer programs, including needs analysis, interfaces with other existing and planned programs, debugs, and develops comprehensive documentation.
4. Implements and evaluates systems and procedures to protect data integrity, reliability, security and accessibility.
5. Organizes and coordinates appropriate staff development activities to ensure proper use of equipment and programs. Assures training is both operational and conceptual in scope.
6. Develops functional specifications, standards and requirements for hardware and/or software purchase and design to ensure optimum system and end-user performance.
7. Promotes participation of and collaboration with end-user and staff representatives in needs assessment, program development, service delivery efforts and project review.
8. Evaluates technological changes, emerging technologies and best practices in computer and communication fields to recommend innovative and cost effective integration of new technologies.
9. Directs the assessment and evaluation of the Information Technology Department, and the District standardized testing programs. Develops formative assessment processes in conjunction with Curriculum and Instruction.
10. In conjunction with Curriculum and Instruction, provides implementation to Smarter Balance Assessments and Common Core Standards.
11. Manages the District's presence on the Internet and provides the appropriate technologies to do so.
12. 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. In conjunction with the Purchasing Department, oversees bid requests, proposals and vendor contracts.

13. Coordinates student and staff events, promoting the use of instructional technology.
14. Serves as a technical resource and assures proper levels of technical support for District personnel; communicates with other administrators, District personnel and outside agencies to coordinate programs and activities, resolve issues and exchange information.
15. Directs the architecture, implementation and management of the District's technology infrastructure and information systems; assures infrastructure supports administrative and instructional technology services District-wide.
16. Directs the development and maintenance of the District's networked information systems including feasibility studies, systems analysis and design, programming, conversion of data, instructional technology and data storage and retrieval.
17. Directs the activities of the Help Desk to assure the resolution of problems and ongoing evaluation of customer satisfaction and problem resolution rates.
18. Confers with and coordinate with District sites and departments that share separate and related services to enhance the integration of technological support to users.
19. Supervises and evaluates the performance of assigned personnel; interviews and selects employees and provides mentoring and coaching to ensure staff development.
20. Provides technical expertise and information to the Superintendent regarding assigned functions and participates in the formulation of policies, procedures and programs; advises the Superintendent of unusual trends or problems and recommends appropriate corrective action.
21. Prepares and delivers oral presentations.
22. Attends and participates in a variety of meetings, workshops, conferences and trainings to maintain current knowledge of emerging technological trends; makes presentations regarding District information services objectives, plans and achievements to groups and committees.
23. Other related duties as assigned.

MINIMUM QUALIFICATIONS

Education and Experience

- Master's Degree from an accredited college/university or extensive experience in Technology, Educational Technology, Computer Science, Information Systems or a related field.
- Demonstrates strong management/leadership skills. A minimum of five years' of management experience.
- Demonstrated record of strategic planning, budget management, integration and staff development.

Licenses/Certifications:

- Teaching or Administrative credential preferred;
- Valid California driver's license.

Abilities

1. Act in a professional and positive manner
2. Establish and maintain cooperative and effective working relationships with others
3. Use tact, patience, and courtesy
4. Ability to articulate and understand complex issues and facilitate effective problem-solving.
5. Knowledge of principles, techniques, procedures and developments for the operation of data processing and communications technology.
6. Understanding of technology integration in support of the instructional program.
7. Knowledge of computerized educational management practices.
8. Knowledge and experience in system design, program development, debugging and system operation.
9. Knowledge of consensus building techniques and conflict resolution strategies.

Working Conditions

While performing the duties of this Job, the employee is often exposed to moving mechanical parts. The employee is occasionally exposed to risk of electrical shock. The noise level in the work environment is usually moderate.

Physical Abilities

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.

Chief Technology Officer

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

EXAMPLES OF DUTIES

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

QUALIFICATIONS

Knowledge of:

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

Ability to:

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

Experience:

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

Education

Current California teaching credential.

Educational Administrative Services credential.

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

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.

VENTURA UNIFIED SCHOOL DISTRICT**CLASS TITLE: CHIEF TECHNOLOGY OFFICER****BASIC FUNCTION:**

Under the direction of the Assistant Superintendent-Business Services and the Assistant Superintendent-Education Services, plan, organize, control and direct Technology Services operations and activities including the development, design, installation, operation, analysis, maintenance and repair of computer and network systems and related hardware, software, databases and applications; coordinate and direct the development and maintenance of the District Technology Master Plan; design, develop and implement plans and projects for the integration and networking of computer hardware, software, infrastructure and telephones; supervise and evaluate the performance of assigned personnel.

REPRESENTATIVE DUTIES:**ESSENTIAL DUTIES:**

- Plan, organize, control and direct Technology Services operations and activities including the development, design, installation, operation, analysis, maintenance and repair of computer and network systems and related hardware, software, databases and applications including student information systems, district networks, provision of web services, information and system security, telephone and communication systems, and other approved district technology needs.
- Ensure that data processing and network activities are coordinated with all affected district operations and appropriate and adequate service is provided to those district functions and offices that rely heavily on information systems including, but not limited to: the Business Services Office fiscal and attendance accounting functions; Human Resources; the Superintendent's Office; Educational Services; and school cafeteria point-of-sale systems.
- Monitor all District technology systems, including, but not limited to: the student information system, network, web servers, email services, and client machines and make recommendations concerning the purchase of software, supply items, and new hardware designed to increase efficiency, access, and reliability.
- Enable the district to offer technology-based and online learning opportunities for students and explore revenue-generating programs for the District.
- Adapt existing technologies to new uses and envision natural relationships between emerging technology resources that can benefit delivery of educational opportunities and District operations.
- Understand and communicate the ramifications of technology use, and develop medium and long range plans for technology use.
- Coordinate and manage the resources necessary to implement and maintain a comprehensive technology strategy.
- Work with District Purchasing office to establish technology procurement processes for the district that meet regulatory requirements and ensure the best value for district software and hardware purchases and consistent with the District's commitment to environmentally friendly technology.
- Provide student data in order to facilitate data-driven decisions that will guide instruction, improve student achievement, and promote Response to Intervention (RTI).

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- Support the integration of K-12 standards-based technology skills into curriculum and assessment.
- Work effectively and communicate with all stakeholders to include, but not be limited to, certificated and classified staff, management, students, parents, governmental entities, and community members.
- Explain, in non-technical terms, what various types of technology do and why each can be essential to learning.
- Communicate and keep the District compliant with legal and ethical issues associated with the use of technology (e.g. cyber ethics, privacy, child protection, public access, copyright).
- Chairs the Technology Committee and works collaboratively to build, manage and monitor the District Technology Plan.
- Confers with all appropriate departments to ensure adequate infrastructure (electrical, structural, temperature controls, etc.) exist throughout the district to support district technology needs.
- Select, supervise and assess the performance of assigned personnel.
- Maintain current knowledge of technological advancements in the computer field; knowledge of personal computers, handheld and personal data devices, network operating systems, bandwidth options, system integration opportunities and emerging technologies.

OTHER DUTIES:

Perform related duties as assigned.

KNOWLEDGE AND ABILITIES:**KNOWLEDGE OF:**

- Planning, organization and direction of Technology Services operations and activities including the development, design, installation, operation, analysis, maintenance and repair of computer systems and related hardware, software, networks, databases and applications.
- Computer systems, hardware, software, databases and applications utilized by the District.
- Practices, procedures and techniques involved in the design, set-up, development and modification of computer, telecommunication and network systems, web sites, hardware, software and applications.
- Educational software and technology applications and trends.
- Principles, methods and procedures of operating computers, network systems and peripherals.
- Computerized data collection, management, manipulation and distribution requirements for analysis and reporting functions.
- Principles, practices and methods of database structures, computer programming and system design.
- System utilities and design and program applications.
- Principles and techniques of systems and network analysis.
- District organization, operations, policies and objectives.
- Policies and objectives of assigned programs and activities.

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- Applicable laws, codes, regulations, policies and procedures.
- Principles and practices of administration, supervision and training.
- Budget preparation and control.
- Oral and written communication skills.
- Interpersonal skills using tact, patience and courtesy.

ABILITY TO:

- Plan, organize, control and direct Technology Services operations and activities including the development, design, installation, operation, analysis, maintenance and repair of computer and network systems and related hardware, software, databases and applications.
- Coordinate and direct the development and maintenance of the District Technology Master Plan.
- Design, develop and implement plans and projects for the integration and networking of computer hardware, software, infrastructure and telephones.
- Supervise and evaluate the performance of assigned personnel.
- Direct the design, set-up, development and modification of computer, telecommunication and network systems, web pages, hardware, software, databases and applications.
- Evaluate and implement educational technology and software.
- Plan, organize, control and direct the investigation, troubleshooting, diagnosis and repair of hardware, software and network malfunctions.
- Coordinate the installation, configuration, maintenance and repair of telecommunication systems.
- Communicate effectively both orally and in writing.
- Interpret, apply and explain laws, codes, rules, regulations, policies and procedures.
- Establish and maintain cooperative and effective working relationships with others.
- Operate a computer and assigned office equipment.
- 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 comprehensive narrative and statistical reports.
- Direct the maintenance of a variety of reports, records and files related to assigned activities.
- Maintain regular and consistent attendance.

EDUCATION AND EXPERIENCE:

Any combination equivalent to sufficient experience, training and/or education to demonstrate the knowledge and abilities listed above. Typically, this would be gained through: bachelor's or master's degree in computer science or related field and five years increasingly responsible experience in the development, design, operation, analysis, maintenance and repair of computer and network systems and related hardware, software, databases and applications. Recent experience with the evaluation and implementation of educational technology and software is highly desirable.

VUSD: Chief Technology Officer - Continued**Page 4****LICENSES AND OTHER REQUIREMENTS:**

Valid California driver's license.

WORKING CONDITIONS:**ENVIRONMENT:**

Indoor work environment.

Driving a vehicle to conduct work.

PHYSICAL DEMANDS:

Dexterity of hands and fingers to operate a computer keyboard.

Hearing and speaking to exchange information.

Seeing to read a variety of materials and view a computer monitor.

Sitting or standing for extended periods of time.

Lifting, carrying, pushing or pulling moderately heavy objects as assigned by the position.

Bending at the waist, kneeling or crouching.

Reaching overhead, above the shoulders and horizontally.

MANAGER, INFORMATION SERVICES

TECHNOLOGY AND INFORMATION SERVICES

DEFINITION

Under general direction of the Chief Technology Officer, the manager leads the Information Services division of the technology department. The Information Services Manager coordinates activities and projects with schools and other departments, including enhancements to business and student systems to improve processes, development of new programs, documentation and training on programming and data standards, maintenance of high-quality data, and State, federal and internal data reporting.

ESSENTIAL DUTIES AND RESPONSIBILITIES include the following. Other duties may be assigned.

- Work with the Chief Technology Officer, and stakeholders, to develop, update, and implement a district-wide technology plan.
- Select, train, motivate, and evaluate assigned staff; provide or coordinate staff training; work with employees to correct deficiencies.
- Work collaboratively with schools and departments to support technology integration and innovation.
- Communicate with CTO, Leadership Team, and other stakeholders about scheduled activities and planned/needed changes to district information systems.
- Provide leadership for technology activities and projects to improve district operations and instructional outcomes.
- Prioritize requests for support and new projects, balancing district need and staff workload.
- Effectively manage personnel, technology, and financial resources to support district operations and goals.
- Develop and maintain a thorough understanding of school site operations and data needs, including processes for scheduling, attendance taking, course development, home-school communication, and reporting requirements.
- Coordinate and supervise data reporting efforts, including required State and federal reporting, as well as reports and analytics to meet district needs.
- Analyze business and instructional practices to identify potential areas for improvement, and apply technical principals and concepts to develop business solutions.
- Plan and conduct regularly scheduled meetings with school site and department representatives to gather feedback on applications and support, and implement strategies to continuously improve services.
- Resolve difficult and complex application problems through analysis and effective utilization of technical staff, coordination with other information technology staff, and use of vendor contracts.
- Evaluate application development practices and create development standards, policies,

- Keep up-to-date on business application development and implementation, trends in K-12 technology, database architectures, technologies, and methodologies, and attend training classes as necessary.
- Monitor quality assurance and security procedures for business and student applications.
- Collaborate with districts, professional organizations, county offices of education, and other organizations to evaluate alternative systems and processes against district's current environment.
- Perform related duties as required.

QUALIFICATION GUIDE

Knowledge of:

- Ability to articulate and understand complex issues and facilitate effective problem-solving.
- Knowledge of principles, techniques, procedures and developments for database development and management.
- Knowledge of school operations and data management requirements.
- Understanding of technology integration in support of the instructional program.
- Knowledge of complex computer systems design, analysis and operations, with a background in managing integrated database file structures.
- Knowledge of relationship building techniques and conflict resolution strategies.

Experience: Preference for administrative experience, in a supervisory or management capacity, with enterprise data systems and technology support.

Education: Bachelor's Degree in technology, business administration or related field; **or** any combination of professional training or experience equivalent to four years in technology, or in fields directly related to position requirements.

QUALIFICATION REQUIREMENTS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

REASONING ABILITY

Ability to apply common sense understanding to carry out instructions furnished in written, oral, or diagram form. Ability to deal with problems involving several concrete variables in standardized situations.

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 and use hands to finger, handle, or feel objects, tools, or controls. The employee is occasionally required to stand; walk, reach with hands and arms; stoop, kneel, crouch, or crawl; and talk or hear. The employee must occasionally lift and/or move up to 10 pounds. Specific vision abilities required by this job include close vision.

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. The noise level in the work environment is usually moderate.

Adapted from IUSD IS Director job description.

DIRECTOR OF INSTRUCTIONAL TECHNOLOGY

DEFINITION

Under the general direction of the Chief Technology Officer, plan, implement, supervise, coordinate and evaluate technology-based instruction, programs and professional learning throughout the district.

Essential Duties and Responsibilities include the following. Other duties may be assigned.

- Coordinate with principals and teaching staff to integrate meaningful technology applications and instructional strategies in all grade levels and content areas.
- Coordinate a comprehensive professional learning program to support education technology adoption.
- Lead the selection, adoption and support of technology-enhanced curriculum, educational software, equipment and learning resources.
- Collaborate with district leadership to leverage technology to improve instruction and support district initiatives across content areas.
- Coordinate information literacy, digital citizenship, and data privacy professional learning, curriculum and monitoring efforts.
- Understand, implement and apply project management best practices to lead change efforts involving complex systems and diverse stakeholder groups.
- Remain current with developments and trends in classroom technology, curriculum and instruction and provide leadership in determining program direction and improvement to curriculum and instruction integration with technology.
- Understand and support implementation of CA Common Core State Standards, Next Generation Science Standards and frameworks for all grade levels.
- Know and understand current research, pedagogies and their implications for program development in SUHSD.
- Serve as liaison and participate with curriculum leaders at the local, county, state, and/or national level.
- Communicate technology initiatives and engage with stakeholders to inform technology planning and programs.
- Assist in the collection, interpretation, and sharing of data related to program adoption, support and student learning outcomes.
- Review, revise and develop policy and procedures to meet district needs and align with legal requirements and best practices.
- Build staff capacity to leverage technology through professional learning, coaching, mentoring and co-planning at the school site, program and district level.
- Coordinate site-based education technology resources, including site technology instructional coaches.
- Coordinate education technology professional learning and community engagement events.

QUALIFICATIONS GUIDE

KNOWLEDGE OF

- Comprehensive knowledge of and experience with effective presentation strategies.
- Researched-based models of professional learning and curriculum-technology integration.

ABILITY TO

- Communicate and collaborate effectively with diverse groups and audiences.
- Promote flexibility and resiliency through thinking critically and creatively.
- Comprehensive knowledge of applicable state and federal laws, regulations, and compliance requirements governing special education programs in California.
- Ability to communicate orally and in writing sufficient to express ideas, thoughts, and instructions clearly to clients, community, and staff.
- Ability to collaborate with other agencies in planning and implementing effective special education programs, including staff and parent training, within established budget constraints.
- Ability to analyze complex situations and prepare response alternatives for consideration by decision-making groups.
- Knowledge of State funding allocation methods.

EDUCATION and/or EXPERIENCE

- Five years of successful certificated teaching experience.
- A Master's degree from an accredited college or university is preferred.
- Valid California teaching or other related Services credential.
- California Administrative Services or other related Services credential.
- Possession of a valid California driver's license.

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 and talk or hear. The employee is occasionally required to walk.

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.

The noise level in the work environment is usually moderate.

TEACHER ON SPECIAL ASSIGNMENT (TOSA)-INSTRUCTIONAL TECHNOLOGY**DEFINITION**

Under general supervision of the Director of Instructional Technology, facilitate and provide teacher leadership for professional learning and instructional practices related to the integration of technology in curriculum and learning, including presenting, facilitating and creating resources, coaching and supporting school sites.

ESSENTIAL DUTIES AND RESPONSIBILITIES include the following. Other duties may be assigned:

- Collaborates with district staff, site administrators, and classroom teachers in implementing a TK-12 vision for instructional technology.
- Provide direct support to school sites and classroom teacher through collaboration, training and Professional Learning Community (PLC) participation.
- Develop processes and policies in support of technology integration and responsible use.
- Assist in the collection, interpretation and application of data and assessment results to improve instructional practice and student learning.
- Mentor and train teachers to apply technology to transform curriculum and instruction.
- Partner with Education Services, school site leadership, site staff, and the Technology and Information Services team to implement the Master Technology Plan and school site technology plans.
- Assess site staff needs for professional development and current levels of technology integration.
- Individualize mentorship approach and model effective technology use for classroom teachers.
- Establish and maintain an educational technology community for assigned sites and/or programs.
- Follow current research and incorporate research into staff development.
- Participate in professional development opportunities.
- Other duties as assigned.

QUALIFICATIONS:

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. Participate in faculty and/or District committees.

CREDENTIAL: Valid California Credential authorizing service in grade levels and areas assigned.

TRAINING AND EXPERIENCE: Successful teaching experience totaling at least five years is preferred. Experience planning for and presenting to larger groups recommended.

EDUCATION: Bachelor's degree including all courses to meet credential requirements.

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 stand; walk; use hands to finger, handle, or feel objects, tools, or controls; reach with hands and arms; talk or hear; and taste or smell. The employee is occasionally required to sit and stoop, kneel, crouch, or crawl. The employee must occasionally lift and/or move up to 10 pounds. 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.

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

Range 44

INFORMATION SYSTEMS SPECIALIST I

DEFINITION

Under supervision, provide technical support to school site and administrative personnel on business and student computer applications; interface with hardware and software vendors; provide assistance and training to users on computer operation.

EXAMPLES OF DUTIES

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

1. Provides technical support developing solutions to user-related problems and application systems.
2. Plans, coordinates, and conducts activities related to technical assistance with student assessment.
3. Organizes and prepares application software documentation, procedural documentation, and operation instructions.
4. Assists in the analysis, evaluation and implementation of student information, business, and similar systems.
5. Reviews and evaluates procedures, schedules and system controls.
6. Reviews and evaluates software and makes recommendations on same.
7. Operates computer and printer and scanning equipment as required.
8. Reports progress status and problems to supervisor or to Specialist III/II.
9. May design, write, or modify computer programs as needed.
10. Maintains daily server backups.
11. Performs other related duties as required.

QUALIFICATIONS

Knowledge of:

Principles, theories and practices pertaining to computer operations; programming languages, operating systems and software utilities; methods and techniques of training.

Ability to:

Analyze and solve problems for effective computer utilization; train users in efficient computer operation; operate computers and write computer programs; maintain current computer technology knowledge; read, interpret, and apply technical manuals and documentation; work independently using sound judgment and prioritize workload; adapt to changing technologies and learn functionality of new equipment and systems; communicate effectively and present information clearly and concisely; work flexible hours when necessary; understand and carry out oral and written instructions; establish and maintain cooperative working relationships; comply with the District's customer service standards, as outlined in Board policy.

Education/Experience:

Any combination equivalent to: An Associate of Arts degree in computer technology or related field and 2 years information systems experience involving programming, computer operations, user training or computer customer support. Experience and education may be substituted on a year-for-year basis.

License/Certificate Requirement:

Possession of a valid California Driver's License.

CAPISTRANO UNIFIED SCHOOL DISTRICT
Information Systems Specialist I – Page 2

PHYSICAL DEMANDS AND WORKING ENVIRONMENT

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

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

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

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

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

10/98

Revised 9/03

Johnson & Associates Revised: 4/06;7/07

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

Range 48

INFORMATION SYSTEMS SPECIALIST II

DEFINITION

Under general supervision, provides technical support to school site and district office staff for student computer software applications; interfaces with software and hardware vendors; provides assistance and training to users on computer operation.

EXAMPLES OF DUTIES

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

1. Provides technical support developing solutions to user-related problems and application systems.
2. Organizes and prepares application software documentation, procedural documentation, and operation instructions.
3. Assists in the analysis, evaluation and implementation of student information systems.
4. Provides training to users of the student information systems software in both a classroom environment and by telephone.
5. Reviews and evaluates software and makes recommendations on same.
6. May design, write or modify computer programs as needed.
7. Reviews and evaluates procedures, schedules and system controls.
8. Evaluates data and reports and maintains quality control.
9. Operates computer and printer and scanning equipment as required.
10. Interfaces with software and hardware vendor personnel to resolve technical issues.
11. Creates data reports, and perform file transfers and data conversions.
12. Reports progress status and problem to supervisor or to Specialist III.
13. Performs other related duties as required.

QUALIFICATIONS

Knowledge of:

Principles, techniques, methods, and procedures pertaining to the various aspects of networked computer systems; appropriate computer hardware and software systems; computer analysis and operation techniques; programming languages, methods and techniques of training; knowledge of database development techniques and software used to implement them.

Ability to:

Effectively and efficiently formulate, implement and maintain computer systems; prepare and present clear and concise reports; to use various programming languages; analyze data and situations; reason logically and creatively identify problems; draw valid conclusions and develop effective solutions; apply creative thinking in design and development of methods of processing data with computers; coordinate work with activities of other technical personnel; adapt to changing technologies and learn functionality of new equipment and systems; speak and write effectively; coordinate work with activities of other technical personnel understand and carry out oral and written instructions; establish and maintain cooperative working relationships; comply with the District's customer service standards, as outlined in Board policy.

Education/Experience:

Any combination equivalent to: An Associate of Arts degree in computer technology or related field, plus two years of progressively responsible experience at the same level of specialist I. Experience at same level may be substituted for the college education requirement on a year-for-year basis.

CAPISTRANO UNIFIED SCHOOL DISTRICT
Information Systems Specialist II – Page 2

License/Certificate Requirement:

Possession of a valid California Driver's License.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT

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

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

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

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

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

10/98
Revised 9/03;4/06;7/07

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

Range 52

INFORMATION SYSTEMS SPECIALIST III

DEFINITION

Under general supervision, provides technical support to school site and district office staff for business and administrative computer software applications; designs and maintains databases and software applications to assist users in accessing data; acts as a liaison with the business software vendors and other vendors to resolve general operation problems; assists and instructs staff in utilizing midrange and personal computer resources.

EXAMPLES OF DUTIES

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

1. Provides technical support developing solutions to user-related problems and applications systems.
2. Organizes and prepares application software documentation, procedural documentation, and operation instructions.
3. Assists in the analysis, evaluation and implementation of student information, business, and similar systems.
4. Designs the data and presentation of applications based on user needs.
5. Reviews and evaluates software and make recommendations on same.
6. Designs, writes or modifies computer programs as needed; assists in the creation of web-based and database applications.
7. Reviews and evaluates procedures, schedules and systems controls; designs and implements security for applications.
8. Evaluates data and designs reports; maintains quality control.
9. Operates computer and printer and scanning equipment as required.
10. Interfaces with software and hardware vender personnel to resolve technical issues.
11. Represents district at technical conferences.
12. Creates data reports, and automates file transfers and data conversions.
13. Performs vendor software upgrades.
14. Reports progress status and problem to supervisor.
15. May oversee work of peers and lower level staff.
16. Performs other related duties as required.

QUALIFICATIONS

Knowledge of:

Principles, techniques, methods and procedures pertaining to the various aspects of a networked computer systems; appropriate computer hardware and software systems; analysis and operation techniques for midrange level computer; program language, methods and techniques of training; knowledge of several database development techniques and software used to implement them.

Ability to:

Effectively and efficiently formulate, implement and maintain computer systems; prepare and present clear and concise reports; to use higher-level programming languages; analyze data and situations, reason logically and creatively identify problems, draw valid conclusions and develop effective solutions; adapt to changing technologies and learn functionality of new equipment and systems; apply creative thinking in design and development of methods of processing data with computers; speak and write effectively; coordinate work with activities of other technical personnel understand and carry out oral and written instructions; establish and maintain cooperative working relationships; comply with the District's customer service standards, as outlined in Board policy.

CAPISTRANO UNIFIED SCHOOL DISTRICT
Information Systems Specialist III – Page 2

Education/Experience:

Any combination equivalent to: Bachelor's Degree with coursework in computer science or a related field, and two years of progressively responsible experience at the same level of Specialist II. Experience at same level may be substituted for the college education requirement on a year-for-year basis.

License/Certificate Requirement:

Possession of a valid California Driver's License.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT

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

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

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

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

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

10/98
Revised 9/03;4/06;7/07

MANAGER-TECHNOLOGY SUPPORT

DEFINITION:

Under the supervision of the Chief Technology Officer, plans and executes goals and objectives of the District's technical support program; supervises and provides direction to assigned technical support personnel; evaluates program effectiveness.

ESSENTIAL DUTIES AND RESPONSIBILITIES include the following. Other duties may be assigned.

- Plans, organizes and supervises the technical support program; oversees daily support needs of the District.
- Supervises, provides training and work direction to and evaluates assigned technical support team personnel.
- Schedules staff to meet technology needs, priorities and timelines.
- Evaluates level of service and effectiveness of technical support program.
- Meets with school site administrators and technicians about specific technical support needs.
- Assigns and manages project-based and ongoing team member support assignments to assure effectiveness and balance workload.
- Manages complex technical projects including requirements definition, budget development, stakeholder engagement, technical design, implementation, staff training and communications.
- Reviews, analyzes and improves technical support and customer service procedures and related systems.
- Plans, develops, coordinates and provides staff training to update and improve technical support team knowledge and skills.
- Investigates, diagnoses and resolves complex technical issues.
- Facilitates effective communication and collaboration within support team, between technicians and other IT divisions, and with consultants and vendors.
- Identifies, evaluates, implements and communicates technology hardware and software standards.
- Determines vendors and negotiates pricing for equipment standards and special projects.
- Reviews technology purchases to assure established standards are met.
- Coordinates technical support for District initiatives and events, including new curriculum and standards implementations, professional learning dates and State testing.
- Serves as a technical liaison for technology issues presented by site and District leadership.
- Researches and applies best practices related to enterprise technology management and service delivery.
- Collaborates with educational agencies, private corporations and other technical resources to continuously assess and improve technical support.
- Prepares, maintains and delivers reports and presentations related to assigned activities including IT projects, service outages and technical support program effectiveness.
- Leads and participates in staff meetings to communicate objectives, share updates, collaborate and gather feedback from personnel.
- Assists in District-wide technology planning, resource prioritization and communications as an active participant of the IT management team.
- Plans for project staffing, equipment and systems needs in anticipation of enrollment and technology program growth.
- Plans, organizes, and manages technology infrastructure. Monitors and evaluates technology infrastructure performance and reliability.
- Anticipates future technology needs and establishes plans to ensure a consistently high-performing
- Assigns and manages project-based and ongoing team member support and system assignments to ensure coverage of critical systems, balanced workload and effective team coordination.
- Reviews, analyzes and continuously improves network services support experience and incident response procedures; Coordinates IT Department response to major incidents; documents diagnosis and resolution.
- Develops annual budget recommendations; identifies systems in need of repair, replacement or upgrade; plans for new projects and ongoing refresh and maintenance needs.
- Reviews current system health and configurations; lead projects to refine and improve data quality, system integrity and network performance.

- Maintains current specialized and advanced knowledge of networking hardware and software; maintains appropriate network management and security certifications or demonstrates equivalent knowledge.
- Manages technology security program, preventing unauthorized access and preserving network reliability.
- Works with facilities and maintenance staff to develop technology standards and ensures school infrastructure can support current and anticipated instructional and administrative needs.
- Leads advanced network and server troubleshooting.
- Develops and implements backup, business continuity and disaster recovery plan in alignment with business needs.
- Designs, installs, maintains and documents district technology infrastructure.
- Establishes and manages technology access and performance monitoring systems and procedures. Takes appropriate action to respond to outages, suspected security breaches and other issues impacting accessibility of technology resources.
- Work collaboratively with vendor partners to specify equipment and systems, obtain favorable pricing, coordinate installation and troubleshoot system issues.
- Operates and maintains a variety of specialized equipment and software related to assigned duties including a computer and assigned software.
- Communicates with various personnel to exchange information, coordinate activities and resolve issues or concerns.

QUALIFICATIONS GUIDE

Knowledge of:

- Network administration principles and procedures.
- Server management, including aligning specifications to program need, forecasting growth, installation, management, backup and recovery.
- Hardware and software installation.
- Cybersecurity systems and best practices, including secure network design, monitoring and incident response.
- Network equipment configuration, installation and management.
- Record-keeping techniques, including design documentation.
- Data center administration, including technology systems and infrastructure design and peripheral equipment (environmental and security controls).
- Technical aspects of field of specialty.
- Oral and written communication skills.
- Interpersonal skills using tact, patience and courtesy.

Ability to:

- Design, install, maintain, and document network hardware, software, and operating systems.
- Troubleshoot complex network and server issues.
- Prepare cost and benefit analyses.
- Implement systems to protect data and network security.
- Utilize a variety of computer applications and operating systems.
- Research and recommend new system software and hardware.
- Analyze situations accurately and adopt an effective course of action.
- Maintain records related to work performed.
- Operate and maintain a variety of specialized equipment and hand tools.
- Maintain current knowledge of technological advances in the field.
- Communicate effectively both orally and in writing.
- Establish and maintain cooperative and effective working relationships with others.
- Describe technical issues to users.
- Work independently with little direction.
- Plan and organize work.

EDUCATION/EXPERIENCE:

Any combination equivalent to: bachelor's degree in computer science or business administration and five years of experience in the installation, maintenance and repair of computer systems, networks, peripherals and related equipment.

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.

- Dexterity of hands and fingers to operate a computer keyboard.
- Hearing and speaking to exchange information in person and on the telephone.
- Seeing to read a variety of materials and view a computer monitor.
- Sitting, standing or walking for extended periods of time.
- Reaching overhead, above the shoulders and horizontally.
- Lifting, carrying, pushing or pulling objects up to 25 pounds.

WORK ENVIRONMENT:

Indoor 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. The noise level in the work environment is usually moderate.

Network Analyst

POSITION DESCRIPTION: The job of Network Analyst was established for the purpose of designing the District's network as well as supporting network systems and sub-systems; resolving network operational issues; maintaining computer and network hardware, software, and wireless network. The position is responsible for planning, organizing, training, and monitoring all aspects of the network.

Essential Duties The duties listed below are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to the position.

1. Design, deploy, and maintain a variety of enterprise level core networking systems including, but not limited to, routers, switches, wireless access points, DHCP, and firewalls.
2. Assess malfunctions of network hardware and/or software applications for the purpose of determining appropriate actions to maintain computer and network operations.
3. Confer with director, information technology on topics related to network installation and configuration for the purpose of providing technical advice and support and implementing the policies and procedures.
4. Execute department activities, computer operations, and data network activities for the purpose of providing services to other divisions, outside agencies, and organizations while meeting department objectives; provide advice and consult on effective use of resources and personnel.
5. Install computers, computer and network equipment, network (client and server) hardware and software on a variety of platforms (e.g. service packs, application software, operating software, hardware upgrades, etc.) for the purpose of upgrading and maintaining equipment and computer networks that will meet the technology needs of the District; develop a cost effective replacement strategy for network equipment.
6. Assist the systems analyst in supporting servers, website, and related hardware and supporting software (e.g. throughput, switches, patch panels, racks, etc.) for the purpose of ensuring that resources and technology are available and utilized effectively; evaluate requests for out of district websites.
7. Prepare written materials (e.g. procedures, drawings, reports, memos, letters, etc.) for the purpose of documenting activities, providing written reference and/or conveying information.
8. Repair network-related failures (e.g. computers, peripherals, network equipment, configuration files, etc.) for the purpose of maintaining computer and network equipment in a safe and functional condition.

9. Research software applications and hardware requirements for the purpose of previewing products to provide recommendations regarding applications and purchases and ensuring availability of materials.
10. Manage systems and servers related to District networks (e.g. e-mail systems, accounts, Voice-over Internet Protocol Systems, IP assignments, computer labs, classroom computers, etc.) for the purpose of ensuring availability of services to authorized users.
11. Train selected District personnel and related site staff (e.g. e-mail, Internet access/resources, multi-platform applications, etc.) for the purpose of providing information on the operations and maintenance of computer systems and/or providing instruction on technology integration into the location.
12. Transport a variety of items (e.g. equipment, supplies, etc.) for the purpose of providing materials at job site or transporting equipment for repair.
13. Other duties as assigned.

KNOWLEDGE:

Perform algebra and/or geometry; read technical information, compose a variety of documents, and/or facilitate group discussions; and analyze situations to define issues and draw conclusions; specific knowledge-based competencies required to satisfactorily perform the functions of the job include: LAN/WAN administration; TCP/IP protocols; current generation operating systems and firewall systems; networking standards and practices; training methodologies for technical employees; safety regulations.

ABILITY :

Schedule activities; gather, collate, and/or classify data; consider a wide variety of factors when using equipment; flexibility is required to work with others; analyze data utilizing defined but different processes; and operate equipment using a variety of processes; work with a diversity of individuals; work with data of varied types and/or purposes; and utilize a variety of types of job-related equipment; problem solving may be required to identify issues and select action plans; problem solving with data requires independent interpretation of guidelines; and problem solving with equipment is moderate to significant; specific ability-based competencies required to satisfactorily perform the functions of the job include: setting priorities; being attentive to detail; working with frequent interruptions; working as part of a team; communicating with diverse groups; conveying technical information to non-technical audiences; meeting deadlines and schedules.

SKILLS:

Perform multiple, technical tasks with a need to periodically upgrade skills in order to meet changing job conditions; specific skill-based competencies required to satisfactorily perform the functions of the job include: operating equipment used in computer networking; preparing and

maintaining accurate records; using pertinent office software and diagnostic applications; operating standard office equipment.

RESPONSIBILITIES:

Work under limited supervision using standardized practices and/or methods; provide information and/or advising others; operate within a defined budget; utilize resources from other work units to perform the job's functions

WORK ENVIRONMENT: The usual and customary methods of performing the job's functions require the following physical demands: occasional lifting, carrying, pushing, and/or pulling; some climbing and balancing; frequent stooping, kneeling, crouching, and/or crawling; and significant fine finger dexterity. Generally the job requires 60% sitting, 20% walking, and 20% standing. The job is performed under conditions with some exposure to risk of injury and/or illness.

Systems Analyst

BASIC FUNCTION:

Under general direction, responsible for providing professional-level technical support services to ensure the integrity and reliability of assigned servers, operating systems, and related network applications and services; participates in the most complex systems infrastructure upgrades, enhancements, conversions and troubleshooting; serves as a technical lead for major platforms and operating systems; leads and manages completion of projects to meet District time, budget and quality requirements.

DISTINGUISHING CHARACTERISTICS

Incumbents are expected to administer and manage assigned systems with high reliability and a minimum of supervision and direction, while providing leadership and technical guidance to other staff performing system administration tasks. Work requires in-depth technical knowledge of the District's overall systems infrastructure and associated integration and interoperating requirements and challenges. Windows group policy creation and modification using advanced scripting techniques to automate and manage the district computer population.

ESSENTIAL DUTIES/RESPONSIBILITIES:

Administers assigned enterprise server platforms running a variety of operating system software in both physical and virtual environments; installs, configures, tests, integrates and administers Windows servers, Active Directory, document management systems and other major servers, including system monitoring and management software tools; using applicable tools and utilities, monitors system performance, including server utilization and availability; performs performance tuning to achieve optimal system speed, reliability and performance; ensures systems security, disaster response and recovery processes are followed; monitors computer room environment for appropriate cooling and power consumption.

Administers or participates in administering enterprise-wide data storage in a Storage Area Network (SAN), Network Attached Storage (NAS) environment; participates in planning storage allocation architecture and allocating storage capacity; tunes and maintains SAN and NAS systems and SAN network connectivity; provides technical oversight of backup strategy; configures and maintains offsite disaster recovery databases.

Researches, troubleshoots and resolves complex and ambiguous problems often involving a combination of hardware, operating system, internally developed and vendor application software and database structure configuration, resource conflict and/or interoperating problems; installs and tests operating system patches, releases, upgrades and fixes; assesses system capacity issues, evaluates software and other alternatives and recommends system upgrades or replacements. Performs systems administration for district-wide applications; monitors daily e-mail notifications generated by scripts; researches and documents server and client configuration issues and the resolution of problems; works with external entities to research and resolve authentication and routing issues; installs and administers spam filters and anti-virus software; interacts with users to determine needs and recommend solutions to email and messaging needs; provides administration support for specialized and complex systems and software.

Monitors disk usage to ensure adequate database resources and provides disk storage as required; assists database administrators with database performance issues; with guidance, makes changes to data permissions, performs cleanup of obsolete data and supports the migration and archiving of data; performs backup and recovery processes; develops scripts to automate routine system maintenance tasks.

Provides technical assistance during the installation and testing of software; installs, tests and configures applications and new software functionalities to applicable server and client platforms; using applicable languages, tools and utilities, provides technical advice to applications development staff of methods of performing application problem troubleshooting and resolution; recommends and installs program modifications to enhance system performance.

Participates with members of the technology services team, vendors and end users to ensure effective integration, operation and concurrent connectivity of multiple platforms and networks; participates in the development and implementation on systems and network standards and procedures.

Works with customers and other technology stakeholders to evaluate the uses of new technology to meet business process requirements; participates in the evaluation of new software and technologies to determine their functionality, interoperability, reliability, availability and supportability and expected return on investment; prepares periodic reports on new trends and opportunities.

Participates in or conducts assigned research and development projects, including assisting network consultants in testing in a virtual environment; participates in developing new methodologies, standards, frameworks and tools; trains other staff on uses of new technology tools.

Maintains up-to-date technical knowledge by attending educational workshops, reviewing professional publications, establishing personal networks and participating in professional associations. Performs other job-related duties as assigned.

JOB COMPETENCIES: KNOWLEDGE, SKILLS, AND ABILITIES:
KNOWLEDGE OF:

Operating system architectures, characteristics, components and commands applicable to enterprise information systems and multiple platform operating systems; principles of network design and integration, including topologies and protocols;
 Data storage technology principles, practices, hardware, components and software including SAN and Windows Active Directory environments;
 Principles, practices and methods of systems/network administration and maintenance, including configuration, performance tuning and diagnostic tools;
 Principles and practices of disaster recovery; database management systems and software, including architectures, diagnostic tools, commands and utilities; Tools and utilities used in monitoring and tuning systems, database and application performance.
 Systems integration design concepts and practices.
 Systems security and capacity planning principles, methods and practices;
 Principles, practices, methods and techniques of project management as they apply to information technology projects.
 Script languages including, command line, visual basic, powershell and other relevant languages.

ABILITY TO:

Perform complex systems administration in a multi-platform and operating systems environment independently and with a high degree of understanding of inter-operating and integration issues. Establish and maintain project schedules and balance responsibilities for multiple activities to ensure timely, high-quality results.

Perform advanced systems troubleshooting and tuning to resolve complex systems management, communication and inter-operating problems.

Communicate clearly and effectively, both orally and in writing.

Prepare clear, concise and accurate proposals, reports, documentation and other written materials.

Exercise sound independent judgment within general policy guidelines.

Keep technical skills current to meet continuing systems administration responsibilities.

Use tact and diplomacy when dealing with sensitive, complex and/or confidential issues and situations.

Establish and maintain highly effective, customer-focused working relationships with all end users, other CVUSD staff, representatives of other agencies and others encountered in the course of work. Maintain an appropriate work pace to accomplish an acceptable volume of work

MINIMUM ENTRANCE QUALIFICATIONS: EDUCATION/EXPERIENCE:

Graduation from an accredited college or university with a degree in management information systems, information technology, computer science or a closely related field, AND at least four (4) years of current systems administration experience in a Windows/Active Directory environment, including configuring, coordinating and implementing releases, upgrades or changes to complex operating systems, servers and related software in a high-availability environment.

LICENSES/CERTIFICATIONS/SPECIAL REQUIREMENTS:

Valid California Class C Driver's License

PRE-EMPLOYMENT REQUIREMENTS

- California Department of Justice and Federal Bureau of Investigation fingerprint check.
- Tuberculosis screening
- Back X-Ray
- Job knowledge/experience based selection tests to assess minimum job competency and placement on the eligibility list established for filling job vacancies in the job class.

TOOLS/EQUIPMENT:

In order to effectively perform the essential functions of the classification, an incumbent is subject to properly operating the following tools/equipment with or without reasonable accommodation and/or on-the-job training upon job entry.

Operate a variety of technology related tools and equipment, including, but not limited to: server and workstation hardware, switches, routers, network cable installation/termination and testing tools; software tools for troubleshooting and configuration, and assorted peripheral devices. Utilize dollies, hand-carts, or other equipment to transport heavy equipment or objects. Operate a variety of office equipment including personal computers and job-specific software applications, and related peripheral equipment, including, but not limited to fax machine, copier, and printer.

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WORK CONDITIONS:

PHYSICAL DEMANDS

Level – Moderate / Performance of position duties/responsibilities is subject to occasional standing, walking, reaching, twisting, turning, kneeling, bending, squatting, and/or stooping, while performing duties requiring lifting, pushing, pulling, carrying, moving, and/or positioning objects weighting up to 25lbs frequently and up to 50lbs occasionally; the position is subject to exercising continuous manual dexterity (i.e., coordinated and/or precise movement of hands, arms and fingers) throughout a work shift to operate computer equipment and peripherals.

ENVIRONMENT/HAZARDS

- Indoor office and/or classroom setting
Minimal temperature variations; generally hazard free environment
- Occasional exposure to nuisance dusts
- Frequently climbing ladders up to 10 ft. and occasionally up to 15 ft.
- Occasional bio-hazards, such as exposure to rodent feces, etc.
- Driving a personal or district vehicle to District sites to conduct work

CLASSIFICATION APPROVAL:

APPROVED:

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CAPISTRANO UNIFIED SCHOOL DISTRICT
San Juan Capistrano, California

DIRECTOR II, TECHNICAL SERVICES

DEFINITION

Under direction of the Chief Technology Officer, the Director II, Technical Services supports the educational programs of the District by directing, managing, supervising and coordinating the activities and functions of the Technical Services department in the areas of technology planning, equipment acquisition, assistance to schools and establishment of standards for hardware and software.

EXAMPLES OF DUTIES

The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to this classification.

1. Direct the operations of the extended Information Technology (IT) infrastructure for all District facilities ensuring effective operations.
2. Direct and provide leadership for network technology and technical services.
3. Participate in development and implementation of District and department technology goals, priorities, standards, and procedures.
4. Collaborate with management, District and Technology and Information Services (TIS) staff providing technical expertise and assistance with TIS projects.
5. Plan, schedule, coordinate and supervise personnel engaged in network design, installation, and maintenance.
6. Ensure proper product selection, bid process, ordering, receiving, imaging, implementation, delivery, repair, and eventual salvage of all district technology.
7. Coordinate work with user departments and other TIS units.
8. Collaborate with Purchasing Department regarding bid review, providing technical specifications and answering Request for Proposal (RFP) questions.
9. Perform need assessments, feasibility planning and other research and make recommendations as appropriate.
10. Determine level and nature of specialized training required to keep staff current with emerging technologies; implements training as appropriate.
11. Assist in the development, coordination and preparation of the annual preliminary budget for the Technical Services division of the Technology Information Services department.
12. Control and authorize expenditures in accordance with established limitations.
13. Keep up-to-date with trends or developments in, and evaluate and recommend adoption of new procedures and types of material or equipment used in technology.
14. Evaluate, supervise and counsel members of staff to improve employee performance ensuring staff adhere to District, state and federal professional standards.
15. Prepare and maintain a variety of reports, records and files related to assigned activities and personnel.
16. Participate in personnel management systems, including the recruitment, selection, retention and separation of personnel.
17. Attend professional learning and conference opportunities regarding District business and other topics relevant to this position, and other professional meetings.

DIRECTOR II, TECHNICAL SERVICES

Page 2

QUALIFICATIONS

Knowledge of: Applicable sections of State Education Code and other applicable laws and collective bargaining agreements; practices and procedures of efficient organization and supervision; practices, procedures, techniques, and strategies for determining operational effectiveness; principles and practices of supervision and training; result and performance evaluation techniques pertaining to program and personnel performance effectiveness; human relations, conflict resolution strategies and team building principles and techniques; record-keeping and report preparation techniques; effective oral and written communication skills; network servers; workstation hardware and software; procedures and techniques for ongoing maintenance and support of computer users; wide area network technologies including routers, video monitoring, and telephone systems; local area network technologies including wiring, hubs, and switches; emerging trends in networking as it applies to educational technology; E-Rate procedures.

Ability to: Direct the functions and activities of the Technical Services division for a school district; demonstrate effective, organizational, and administrative leadership; read, interpret, apply, and explain rules, regulations, policies, and procedures; supervise, evaluate and discipline subordinates; establish, maintain and nurture professional relationships with management, colleagues, staff, and school related outside agencies; analyze and evaluate data for specific use; demonstrate organizational, time management, analytical and problem solving skills; communicate effectively both orally and in writing using tact and diplomacy; train and instruct others in performance of their duties; understand and carry out oral and written instructions; use interpersonal skills with tact, patience and courtesy; maintain confidentiality; prioritize workload and conflicting demands; establish and maintain records; incorporate new technology into future hardware and network service delivery plans; comply with the District's customer service standards, as outlined in Board Policy.

Education: BA/BS (or four years experience equivalent to graduation with a Bachelor's Degree) in information technology, business administration, computer science, or a related field.

Experience: Six years of progressively responsible professional experience in information technology, specifically in the areas of systems engineering, networking, communications and/or operating systems including four years of successful experience in a management or supervisory position. Minimum two years IT management experience. Experience in public sector or educational environment preferred.

License: California Chief Technology Officer Mentor Program Certification preferred.

TECHNOLOGY SUPPORT SPECIALIST I

DEFINITION

Under general supervision, to provide technology assistance at the assigned high school in the operation, maintenance and support of a computer network including all technology devices, software, peripherals and Audio Visual equipment; install and configure personal computer and tablet equipment; install and configure necessary software applications and applications; perform related work as required.

EXAMPLES OF DUTIES

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

1. Operates and maintains a variety of equipment including computers, tablets, printers, network servers, and other networking equipment.
2. Provides basic computer and tablet support services to maintain optimum system operations including preventative maintenance. Assist in the maintenance of the school Local Area Network (LAN) including coordination of daily tasks.
3. Assists in the implementation and support of network security on the high school Local Area Network (LAN).
4. Provide assistance in the review of hardware and software requirements.
5. Maintains records and inventory of equipment and software.
6. Sets up and configures new and existing instructional and administration computers and tablets.
7. Installs software and applications on new and used equipment computers and tablets
8. Responds to hardware and software technology service requests.
9. Troubleshoots computer and printer problems.
10. Maintains records on all computer and tablet installations and technology service requests.
11. Works with vendors on software and hardware installations, troubleshooting, administration and maintenance.
12. Provides assistance with District technology initiatives as needed.
13. Performs preventative maintenance on hardware and software.
14. Performs other related duties as required.

QUALIFICATIONS

Knowledge of:

Methods, tools and equipment used in the installation and service of hardware and software; various computer and tablet operating systems; current computer network technology; basic industry standard networking principles.

Ability to:

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

Education/Experience:

Any combination equivalent to: Completion of the twelfth grade, supplemented by training and/or coursework in computer and network operations; and one year computer related experience or any combination of experience and coursework in such areas as installation, configuration, troubleshooting, and repair of computer hardware, software, and peripheral devices preferably in a networked environment.

License/Certificate Requirement:

Possession of a valid California Driver's License.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT

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

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

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

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

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

TECHNOLOGY SUPPORT SPECIALIST II

DEFINITION

Under general supervision, to provide technology support in the operation, maintenance and support of a computer network including all technology devices, software, peripherals and Audio Visual equipment; install and configure personal computer and tablet equipment; install and configure necessary software and applications; perform related work as required; provide assistance, direction and training to users and school site staff; recommend and order equipment and supplies approved by the site; work at assigned site to troubleshoot problems with servers, network equipment, computers, tablets, printers and software; work with specified site administrator to prioritize work at the site; communicate with district technology staff on technical issues and site priorities.

EXAMPLES OF DUTIES

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

1. Operates and maintains a variety of equipment including computers, printers, tablets, network servers, and other networking equipment.
2. Reviews hardware and software requirements.
3. Responds to hardware and software technology service requests.
4. Meets regularly with assigned school site administrator to review site priorities and initiatives.
5. Recommend and order equipment and supplies and track shipments approved by the site;
6. Communicate site priorities, initiative and technical issues with district technology staff.
7. Sets up and configures new and existing instructional and administration computers and tablets.
8. Installs software and applications on new and used computers and tablets.
9. Provides computer and tablet support services to maintain optimum system operations including preventative maintenance.
10. Troubleshoots computer, tablet and printer problems. Performs preventative maintenance on hardware and software; performs basic hardware repair.
11. Assists in the basic maintenance, upgrades, and security of the school site's Local Area Network (LAN) including the wireless network.
12. Installs and configures servers for network placement.
13. Installs and configures networked applications.
14. Installs and performs basic configuration of network switches and wireless equipment.
15. Troubleshoots and resolves basic network problems.
16. Maintains records on all computer and tablet installations and technology service requests; maintains equipment and software inventory for assigned site.
17. Coordinates networking data wiring layouts and additions.
18. Works with vendors on software and hardware installations, troubleshooting, administration and maintenance.
19. Creates documentation and other technical documents.
20. May provide phone support for school site staff; assists users with cell phone setup and troubleshooting.
21. Provides assistance with District technology initiatives as needed.
22. Performs other related duties as required.

QUALIFICATIONS

Knowledge of:

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

PROGRAMMER/DATABASE ADMINISTRATOR

DEFINITION:

Under the supervision of the Information Services Manager, leads and participates in programming, coding, testing and maintaining assigned computer systems and programs; maintains, enhances, upgrades, and secures District data systems; assists in prioritizing and managing programming requests; analyzes needs, evaluates, and designs systems and programs; assists end-users in the operation of systems; performs related work as required; trains and provides work direction to assigned personnel.

ESSENTIAL DUTIES AND RESPONSIBILITIES include the following. Other duties may be assigned.

- Leads and participates in programming, coding, testing and maintaining assigned computer systems and programs; troubleshoots, identifies, evaluates and resolves system and program problems and malfunctions.
- Reviews, analyzes and modifies existing systems and programs as necessary; prioritizes and responds to requests concerning existing computer systems and programs; compiles and edits programs and make necessary adjustments.
- Designs, develops and implements new system applications, custom software systems and architecture for databases as appropriate; consults with users to provide technical support and to determine systems and program requirements and objectives; develops complex systems in response to feedback of personnel.
- Maintains, monitors and analyzes District data systems security; troubleshoots technical problems, and responds to District needs for growth in storage and services.
- Develops complex applications, queries, and reports to support instructional and operational needs of the district.
- Oversees and participates in the development of specifications for hardware and software systems; evaluates and recommends vendor solutions; coordinates, designs and implements in-house requests for new software functionalities.
- Evaluates, prioritizes, and coordinates programming requests and support activities, to ensure productive and sustainable use of resources.
- Trains and provides work direction to assigned personnel; participates in and leads projects and teams.
- Analyzes data processing procedures, systems, and organizational structure; recommend, design, and implement solutions to increase process automation, improve data integrity, and/or enhance system functionality.
- Prepares program documentation, writes operational instructions, and prepares end-user manuals.
- Develops systems and logic diagrams and documentation for a variety of applications.

- Communicates with administrators, end users, vendors, service providers and other outside organizations to coordinate activities, programs, schedule work, resolve issues; remains up-to-date on technology changes and trends.
- Advises department management of unusual trends or problems and recommend appropriate corrective action.
- Prepares and maintains a variety of records and reports related to assigned activities.
- Attends and participates in meetings, conferences and in-service trainings; maintains current knowledge of technological advances and industry trends.

QUALIFICATIONS GUIDE

Knowledge of: • Principles, practices and techniques of data base structures, computer programming and system design. • Advanced computer programming systems, utilities and applications utilized. • Applicable programming languages. • Methods and procedures of operating computers and peripheral equipment. • Principles and techniques of systems analysis. • Technical aspects of field of specialty. • Techniques of testing and debugging computer programs. • Record-keeping and report preparation techniques. • Interpersonal skills using tact, patience and courtesy. • Oral and written communication skills.

Ability to: • Leads and participates in programming, coding, testing and maintaining assigned computer systems and programs. • Review, analyze and modify existing systems and programs as necessary. • Design, develop and implement new system applications as appropriate. • Troubleshoot and repair system malfunctions. • Provide technical assistance to computer systems users. • Trains and provides work direction to assigned personnel. • Detect errors in data and program structure, logic and coding. • Test and de-bug programs for accuracy and reliability. • 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 time lines. • Work independently with little direction. • Prioritize and schedule work.

EDUCATION/EXPERIENCE: Any combination equivalent to: bachelor's degree in computer science, information systems or related field and four years increasingly responsible programming experience.

LICENSES AND OTHER REQUIREMENTS: • Valid California Class C driver's license.

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.

- Hearing and speaking to exchange information in person or on the telephone. • Seeing to view a computer monitor. • Dexterity of hands and fingers to operate a computer keyboard. • Lifting, carrying, pushing and pulling objects up to 25 pounds. • Bending at the waist, kneeling or crouching.

WORK ENVIRONMENT: Indoor/Office 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. The noise level in the work environment is usually moderate.

TECHNOLOGY SUPPORT SPECIALIST III

DEFINITION

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

EXAMPLES OF DUTIES

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

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

QUALIFICATIONS

Knowledge of:

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

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

Ability to:

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

Education/Experience:

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

License/Certificate Requirement:

Possession of a valid California Driver's License.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT

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

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

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

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

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

TECHNOLOGY SUPPORT SPECIALIST IV

DEFINITION

Under general supervision, perform intermediate duties relating to the installation, maintenance and support of computer networks and related software and hardware at various sites; support the addition of networks, links, and upgrades; maintain computer data communications networks and perform associated technical and support functions; provide assistance, direction and training to users, technology staff, and school site staff; work at various sites to troubleshoot problems with servers, network equipment, workstations, printers and software; communicate with District and site support staff on technical issues.

EXAMPLES OF DUTIES

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

1. Operates and maintains a variety of equipment including computers, printers, network servers, and other networking equipment.
2. Reviews hardware and software requirements.
3. Responds to hardware and software service requests.
4. Provides project management.
5. Provides leadership to other technology support staff.
6. Coordinates computer installations, desktop projects and day to day activities.
7. Sets up and configures new and existing instructional and administration Windows and Macintosh computers.
8. Installs software on new and used Windows and Macintosh systems.
9. Troubleshoots complex personal computer software and hardware problems.
10. Installs and performs advanced configuration of Microsoft-based and Apple-based servers.
11. Administrates multi-tier Microsoft-based or Apple-based server infrastructure including but not limited to user accounts, groups, DHCP, WINS, file shares, printing.
12. Performs advanced installation and configuration of switches including VLANs, Access Lists and layer 3 functionality.
13. Installs and performs basic configuration of Cisco routers.
14. Troubleshoots and resolves basic to advanced network problems.
15. Installs and configures RAID and storage area networks (SAN).
16. Installs and performs advanced configuration of management software including backup software, antivirus, and various server management utilities.
17. Installs and performs advanced configuration of a multi-tier Microsoft Exchange infrastructure.
18. Installs and configures technologies including web servers, Internet filters, database servers and firewalls.
19. Provides technology reviews, written proposals, presentations and technical specifications.
20. Researches and evaluates Local Area Network (LAN) products and alternatives.
21. Provides technical recommendations in written professional format.
22. Installs and performs advanced configuration of other networked applications.
23. Maintains records on all computer installations and technology service requests.
24. Coordinates network data wiring layouts and additions.
25. Works with vendors on software and hardware installations, troubleshooting, administration and maintenance.
26. Creates documentation, manuals and other advanced technical documents.
27. Provides assistance with District technology initiatives as needed.
28. Performs other related duties as required.

QUALIFICATIONS

Knowledge of:

Methods, tools and equipment used in the installation and service of hardware and software; Windows and Macintosh computer operating systems; current computer network technology; basic industry standard networking principles, theories and practices; intermediate understanding of networking protocols, hardware and technology including Ethernet/Fast Ethernet/Gigabit Ethernet, Cisco IOS, Microsoft Active Directory Services; understanding of physical wiring standards including CAT-5 and fiber optics; design of Main Distribution Frame (MDF) and Intermediate Distribution Frame (IDF); LAN and WAN design using commonly available technologies; firewall and network security; intermediate TCP/IP design and configuration; use of network management software.

Ability to:

Install computers, printers and other peripheral devices; install and test software and hardware; install and configure network and server-based application software; install and configure server-based solutions including Terminal Services, web-based application services, and other emerging technologies; evaluate and recommend networked applications; provide leadership and support to technology support staff; work closely with the management in long-term plans and strategies; assist with the maintenance and troubleshooting of network hardware and software; communicate clearly and concisely both oral and written; adapt to changing technologies and learn functionality of new equipment and systems; demonstrate good interpersonal skills to work with students, teachers, administrators, supervisors, coworkers and vendors; learn new skills to keep current with technology changes; instruct others in the use and care of network technology and software; work with limited supervision; multi-task while maintaining patience and flexibility; manage time effectively between multiple sites; understand and carry out oral and written instructions; establish and maintain cooperative working relationships; comply with the District's customer service standards, as outlined in Board policy.

Education/Experience:

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

License/Certificate Requirement:

Possession of a valid California Driver's License.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT

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

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

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

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

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

Appendix B - Study Agreement

FCMAT

FISCAL CRISIS & MANAGEMENT
ASSISTANCE TEAM

CSIS California School Information Services

FISCAL CRISIS & MANAGEMENT ASSISTANCE TEAM STUDY AGREEMENT October 8, 2018

The Fiscal Crisis and Management Assistance Team (FCMAT), hereinafter referred to as the team, and the Sequoia Union High School District, hereinafter referred to as the district, mutually agree as follows:

1. **BASIS OF AGREEMENT**

The team provides a variety of services to local education agencies (LEAs). The district has requested that the team assign professionals to study specific aspects of the district's operations. These professionals may include staff of the team, county offices of education, the California 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 Organizational Review**

1. Conduct an analysis of the district's state of technology including planning, project management, organizational structure and department staffing, and make recommendations for improvement, if any. Interview principals, department directors and classified staff to gather data on the technology support needed. Provide a recommended organizational chart to best meet the district's technology needs at both the central office and schools.
2. Review and analyze the district's technology master plan and upcoming projects, and make recommendations for improvement, if any.

3. Analyze the status of the following, and make recommendations for improvement, if any:
 - a. Districtwide technology planning
 - b. Project management
 - c. Help desk system and ticketing
4. Review the job descriptions and staffing of the technology department, including any site-level support, and make staffing recommendations based on the support needed to meet the district's technology requirements. Provide sample job descriptions for any new positions recommended.

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 Meeting – 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 memorializing the topics discussed in the exit meeting.
5. Draft Report – 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 by the district within six to 12 months after completion of the study, FCMAT will return to the district at no cost 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. FCMAT will work with the district on a mutually convenient time to return for follow-up support that is no sooner than eight months and no later than 18 months after completion of the study.

3. **PROJECT PERSONNEL**

The FCMAT study team may also include:

- | | |
|----------------------------|-------------------------|
| <i>A. To be determined</i> | <i>FCMAT Staff</i> |
| <i>B. To be determined</i> | <i>FCMAT Consultant</i> |
| <i>C. To be determined</i> | <i>FCMAT Consultant</i> |

4. **PROJECT COSTS**

The cost for studies requested pursuant to Education Code (EC) 42127.8(d)(1) shall be as follows:

- A. \$800 per day for each staff member while on site, conducting fieldwork at other locations, presenting reports or participating in meetings. The cost of independent FCMAT consultants will be billed at their actual daily rate for all work performed.
- 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 2A, the total not-to-exceed cost of the study will be \$24,500.

- 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, located at 1300 17th Street, City Centre, Bakersfield, CA 93301.

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. Policies, regulations and prior reports that address the study scope.
 - 2. Current or proposed organizational charts.
 - 3. Current and two prior years' audit reports.

4. 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.
 5. Documents should be provided in advance of fieldwork; any delay in the receipt of the requested documents may affect the start date and/or completion 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 and will be established upon the receipt of a signed study agreement:

Orientation:	to be determined
Staff Interviews:	to be determined
Exit Meeting:	to be determined
Draft Report Submitted:	to be determined
Final Report Submitted:	to be determined
Board Presentation:	to be determined, if requested
Follow-Up Support:	if requested

7. **COMMENCEMENT, TERMINATION AND COMPLETION OF WORK**

FCMAT will begin work as soon as it has assembled an available and appropriate study team consisting of FCMAT staff and independent consultants, taking into consideration other jobs FCMAT has previously undertaken and assignments from the state. The team will work expeditiously to complete its work and deliver its report, subject to the cooperation of the district and any other parties from which, in the team's judgment, it must obtain information. Once the team has completed its fieldwork, it will proceed to prepare a preliminary draft report and a final report. Prior to completion of fieldwork, the district may terminate its request for service and will be responsible for all costs incurred by FCMAT to the date of termination under Section 4 (Project Costs). If the district does not provide written notice of termination prior to completion of fieldwork, the team will

complete its work and deliver its report and the district will be responsible for the full costs. The district understands and agrees that FCMAT is a state agency and all FCMAT reports are published on the FCMAT website and made available to interested parties in state government. In the absence of extraordinary circumstances, FCMAT will not withhold preparation, publication and distribution of a report once fieldwork has been completed, and the district shall not request that it do so.

8. INDEPENDENT CONTRACTOR

FCMAT is an independent contractor and is not an employee or engaged in any manner with the district. The manner in which FCMAT's services are rendered shall be within its sole control and discretion. FCMAT representatives are not authorized to speak for, represent, or obligate the district in any manner without prior express written authorization from an officer of the district.

9. INSURANCE

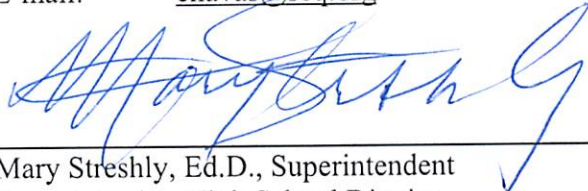
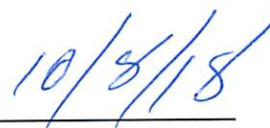
During the term of this agreement, FCMAT shall maintain liability insurance of not less than \$1 million unless otherwise agreed upon in writing by the district, automobile liability insurance in the amount required under California state law, and workers' compensation as required under California state law. FCMAT shall provide certificates of insurance, with Sequoia Union High School District named as additional insured, indicating applicable insurance coverages upon request prior to the commencement of on-site work.

10. HOLD HARMLESS

FCMAT shall hold the district, its board, officers, agents and employees harmless from all suits, claims and liabilities resulting from negligent acts or omissions of its board, officers, agents and employees undertaken under this agreement. Conversely, the district shall hold FCMAT, its board, officers, agents and employees harmless from all suits, claims and liabilities resulting from negligent acts or omissions of its board, officers, agents and employees undertaken under this agreement.

11. CONTACT PERSON

Name: Enrique Navas
Assistant Superintendent of Administrative Service
Telephone: (650) 515-7822
E-mail: enavas@seq.org

Mary Streshly, Ed.D., Superintendent
Sequoia Union High School District

Date



October 8, 2018

Michael H. Fine,
Chief Executive Officer
Fiscal Crisis and Management Assistance Team

Date