

December 18, 2015

Greg Magnuson, Superintendent
Buena Park School District
6885 Orangethorpe Ave.
Buena Park, CA 90620

Dear Superintendent Magnuson:

The purpose of this management letter is to confirm the findings and recommendations of the Fiscal Crisis and Management Assistance Team (FCMAT) resulting from a recent technology staffing review of the Buena Park School District. As indicated in the study agreement, dated April 7, 2015, FCMAT reviewed the staffing of the district's Information Technology Department and the duties and responsibilities of other staff in the district that provide technology support.

The study agreement states that FCMAT will perform the following:

1. Conduct an on-site visit of one to two days to review the staffing of the Information Technology Department and any other staff in the district that provide technology support. FCMAT will conclude the on-site review with a management letter containing recommendations for current and future staffing.

This letter provides FCMAT's findings and recommendations.

FCMAT conducted fieldwork at the district office on June 4-5, 2015, with additional off-site work during the weeks that followed. FCMAT reviewed numerous documents including job descriptions, technology plans, recent bond information and other data pertinent to the study.

Background

Buena Park School District is a public school district of 4,985 students in kindergarten through eighth grade located in Orange County, California. It includes the communities of Buena Park, La Palma, Fullerton, Anaheim and unincorporated areas of north Orange County, covers nine square miles, and includes six elementary schools and one junior high school.

The student population includes 3,289 (66%) Hispanic/Latino students and 2,187 (44%) English learners. (2014-15 CALPADS, <http://dq.cde.ca.gov/dataquest>)

On June 3, 2014, the community authorized a \$71 million, 30-year general obligation bond measure that includes facilities modernization and technology infrastructure upgrades to support modern classrooms. The district describes the bond as follows: (<http://www.bpsd.k12.ca.us/district/FacPrg.aspx>)

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Measure “B” will enhance student safety, repair our 50-year old schools, upgrade classrooms, libraries and science and computer labs to keep pace with technology, meet modern learning standards for today’s college and careers, and support programs that give our students a solid background in math, science, literacy and language skills.”

Among the goals of the bond are implementing modern learning environments in all schools, upgrading the systems that support routine and emergency communications, and upgrading the broadband network. The planned technology infrastructure upgrades include the following:

- Districtwide recabling for data and voice
- New backbone switches and routers
- Upgraded fire alarm systems
- Voice over IP (VoIP) phones and clock speakers

Classroom modernizations include the following:

- New audio and sound systems
- New projectors/interactive display systems
- Campuswide Wi-Fi

The bond project is structured in phases and includes a 2-year implementation of a 1-to-1 iPad project for students. The district will distribute approximately 1,750 iPads in 2015-16, followed by 1,100 in 2016. Associated with the iPad rollout is a planned program of professional development and staff training where teachers will receive a MacBook and iPad and attend training sessions on the use of iPads in the classroom before the devices are issued to students.

The district’s administration contacted FCMAT in April 2015 to request a review of the structure and adequacy of district staffing, related to technology support. Because Measure B includes a broad range of technology upgrades and classroom enhancements, the support of district technology staff and administration will be critical to the success of the projects and the achievement of the district’s goals over time.

Study Team

The study team was composed of the following members:

Scott Sexsmith
FCMAT Management Analyst
Bakersfield, CA

Laurel Krsek*
Technology Director
San Ramon Valley Unified School District
Danville, CA

Leonel Martínez
FCMAT Technical Writer
Bakersfield, CA

*As a member of this study team, this consultant was not representing her respective employer but was working solely as an independent contractor for FCMAT. Each team member reviewed the draft report to confirm its accuracy and to achieve consensus on the final recommendations.

Overview of Current Staffing to Support Technology

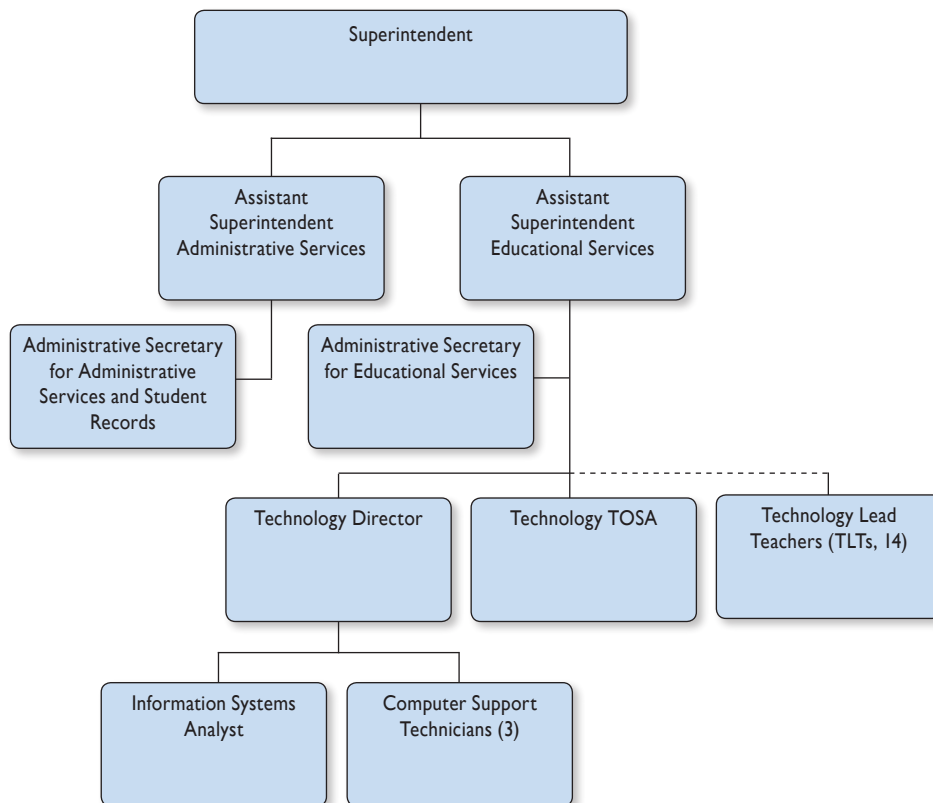
Technology in the district is supported by positions in the Educational Services and Administrative Services divisions. Each division is overseen by an assistant superintendent.

The Technology Department is in the Educational Services Division and is led by a technology director. It includes an information systems analyst and three computer support technician IIIs.

Also included in Educational Services are a technology teacher on special assignment (TOSA), 14 technology lead teachers and an administrative secretary of educational services.

In the Administrative Services Division, the assistant superintendent of administrative services is responsible for the student information system and facilities, and the administrative secretary of administrative services performs the duties of a student records specialist.

The following chart shows the district's organizational structure for technology support.



Educational Services

Assistant Superintendent of Educational Services

As the overseer for the Technology Department, the assistant superintendent of educational services is ultimately responsible for district technology planning, classroom technology hardware, software and peripherals, instructional and assessment systems, and network management systems. The assistant superintendent is also responsible for professional development and oversees the TOSA and the technology lead teachers located at the schools.

Overall, staff interviewed indicated the district would benefit from re-examining the technology planning process and leadership roles for the use of technology in classroom instruction. This is also reflected in the fact that the technology plan is expired.

Recommendation

The district should:

1. Plan and implement a comprehensive program of coaching and support to coincide with the 1-to-1 initiative and establish standards for the iPad rollout at each grade level. Teachers will need advice and guidance about selecting apps, managing them, and communicating to parents about how their students will be utilizing online resources in the curriculum. Methods for teachers to select, purchase and evaluate software, policies and procedures for data sharing with software vendors, standards for student logins, and guidance for online student behavior are important components of a successful 1-to-1 environment.

Technology Director

The technology director reports to the assistant superintendent of educational services and is directly responsible for network and infrastructure oversight and planning, network systems including virus protection, spam and content filtering, facilities modernization related to technology, project monitoring, classroom technology hardware repair and maintenance, software, audiovisual equipment, and technology support for schools and the district office.

The technology director maintains Internet filtering settings, manages the technical support staff, assigns online work orders, and regularly interacts with outside contractors and vendors to oversee purchasing and implementation of new systems. The technology director monitors all technology-related facilities upgrades, from cabling and infrastructure to classroom presentation equipment. Job walks to meet with contractors regarding the bond-related projects and construction oversight consume the majority of the technology director's time. Most of the director's time is spent performing tasks that are directly related to implementing the technology acquired through the bond funds.

All technology staff interviewed indicated a lack of communication within the Technology Department. The department infrequently holds meetings where all staff are present. Staff were unaware and/or unclear of major district goals and objectives.

School districts are increasingly combining the functions of educational technology leadership and planning, technical services and support, infrastructure and networks, data and systems into a chief technology officer (CTO) position. A CTO can facilitate the communication between all departments, ensure efficient operations and effective use of resources.

Recommendations

The district should:

1. Assign the technology director to establish a regular meeting schedule for technology support staff. Regular meetings ensure the alignment of district goals to technology support activities and the ability of the Technology Department to respond to unanticipated emergencies. Successful 1-to-1 projects are supported by a highly efficient, high-performing technology support team. In these teams, each individual understands the district priorities, and each technician can make independent decisions in the field that support the common goals. The discussion and team problem solving that occur in regular meetings is essential to building a culture of shared mission and responsibility.
2. Assign the technology director to organize annual or semiannual meetings with key leaders at school sites. These should include technology department leaders, district and site technicians, school principals and faculty leaders. Having a Technology Department representative or team meeting at each site to gather feedback and discuss unique, site-specific instructional priorities and technology needs helps align Technology Department goals, increases collaboration throughout the district, and improves customer satisfaction.
3. Replace the technology director position with a CTO. Without strong leadership and communication between technology, facilities and educational services, many project components will be difficult to coordinate.

iPad Distribution

Approximately 1,750 iPads are being distributed at the beginning of the school year. The first phase of the iPad initiative will be followed by purchases of 1,100 additional devices in year two. A mobile device management (MDM) system, Airwatch, will allow centralized control of the devices to update operating systems and install and manage apps.

Staff indicated they are uncertain about plans for technology support as the focus on the 1-to-1 rollout intensifies. The district has obtained the assistance of outside contractors for implementation, and initial teacher training is organized and underway. However, once initial construction, installation and system implementation are complete, the district apparently has no detailed plan for the transition from outside contractors and consultants to internal staff. Staff were unclear on how the devices will be used to administer state California Assessment of Student Performance and Progress (CAASPP) tests.

Recommendations

The district should:

1. As the devices are received from the vendor and inventoried, establish a standard for naming, asset tagging, configuring and testing the device, assigning each to a site or classroom, and handling returns and damage. The schools, teachers, computer support technicians and business office staff must be aware of these processes. The Technology Department director and staff should lead this effort in coordination with the business office and site staff, and document the procedures.

2. Assign the Technology Department staff to consistently monitor wireless usage and train computer support technicians to respond to access problems at the schools as they arise, and plan to increase the quantity or adjust the placement of wireless access points as indicated. Effective use of the iPads requires reliable, high capacity network performance.
3. Ensure the Technology Department communicates clearly about the impacts to teachers during staff development sessions and with online documentation and resources. As students begin to use the iPads in the classroom, teachers will need to understand how the MDM tools will affect their work and their students' access to resources via their device. The district should also provide teachers with guidance about classroom management techniques in a mobile, 1-to-1 environment. Basic diagnostics and troubleshooting for iPad functionality are essential skills for teachers as they encounter issues in their classrooms during the day.
4. Since the iPads will be distributed to the classrooms and housed in mobile carts when not in use, the district should ensure that the Technology Department assists teachers by developing and communicating the best methods for iPad storage, device distribution and handling, cart security, and power and batteries. If the carts are shared between classrooms, the logistics and time schedules for making them available will be important considerations for the affected teachers to consider.
5. Consider the impact of iPads on the administration of the state CAASPP tests. A physical keyboard and headphones are required when using iPads for state CAASPP testing. Students should have ample time and opportunities during the year to practice the tests with keyboards and headphones attached to the iPads. Familiarity with the devices will contribute to student success on the tests.
6. Ensure the Technology Department determines in mid-school year how to manage the existing inventory during the summer and the logistics for receiving additional devices for the next phase of the project. Evaluating the successes and obstacles of the first distribution will be essential to the next phases.

Information Systems Analyst

The information systems analyst reports to the technology director. This individual acts as webmaster, supports and maintains file servers, switches and routers, performs network configurations and server virtualizations, supports information systems including Microsoft Active Directory, Aeries student information system, Bi-Tech integrated financial system, email, virus protection, spam and content filtering, analog phones, and clock/speakers. This position will support the Cisco VoIP phone system once the project is installed and completed.

The responsibilities of this position encompasses the duties of a system administrator, network administrator, and database administrator. It also functions as the district webmaster and is the sole manager of content. This position has no backup, and no one has been cross-trained to fulfill these duties in case of absence. The lack of redundancy, cross-training and documentation for this position place the district at high risk. The broad scope of the work does not allow time to attend to documentation, disaster recovery or business continuity planning, all of which could fall within the responsibilities of an information systems analyst.

Although the job description includes end-user training and support and oversight for technology purchasing, these are performed by other district staff.

Recommendations

The district should:

1. Review and evaluate the information systems analyst job description to update the duties and responsibilities of the job.
2. Select a Web content management system to more easily distribute the task of keeping the website updated. This would free the information systems analyst to work within the job description, ensure the district and school web sites have a similar appearance, and improve all departments' and sites' ability to manage the posting of content.
3. Document procedures and cross-train Technology Department staff to support critical systems. This is typically done under the direction of a technology director or CTO. The process of cross-training should include the creation of system documentation and a review of procedures for disaster recovery and business continuity. The technology director or CTO should provide backup support and be cross-trained in the critical support functions performed by the information systems analyst.

Computer Technician III

The district has three full-time computer support technician IIIs, two of whom were hired recently to expand the department. The senior technician is the primary support person for desktop computers and classroom audiovisual equipment, and the newly hired computer technician IIIs have been assigned to distribute and support the Apple laptops and iPads in coordination with the information systems analyst. Both new technicians have had experience with Apple platforms and iPad deployments in their previous jobs.

The computer support technicians are assigned work through the School Dude IT Direct work order system, which is managed by the technology director, and they respond to calls on their cell phones. They do not have a regular schedule of site visits. Once on site and contacted by site staff, they often attend to issues beyond those identified in their intended work orders, and it becomes difficult to adhere to scheduled work, resulting in dissatisfaction by site staff in their overall performance.

Because technicians are itinerant, it is critical for users to be aware of the computer support technician IIIs' schedules. Districts with the highest levels of customer satisfaction have developed a plan and communicated a realistic set of expectations for technology support response times.

Recommendations

The district should:

1. Utilize the IT Direct system for all support requests and provide additional School Dude training for staff. With limited technical support staff, the full utilization of the online work order system is important for communication and customer satisfaction. Although contacting a technician directly may seem expedient, it will be difficult to establish an efficient technology support program without documenting the quantity and types of service requests generated. The data gathered in the system could support

evaluation and planning in the Technology Department, and adherence to a single, consistent communication method for technology support will increase customer satisfaction and confidence.

2. Train all three of the computer technician III positions to be responsible for all aspects of computer and mobile device support instead of the current model where the primary responsibilities are divided between staff. This will allow technicians to respond to any and all requests for service and provide support sustainability in the case of staff turnover or absences.
3. Establish a technology support model where the computer technicians have a minimum set schedule for site visits, which can be augmented by responding to additional service requests as time and schedules permit. These schedules should be clearly communicated to all sites.

Teacher on Special Assignment (TOSA)

The district TOSA is responsible for developing the technology plan, conducting technology training for teachers, and acting as the district liaison to the school technology lead teachers. The technology plan expired on June 30, 2015 and the TOSA has not yet begun creating a replacement plan.

The TOSA is the sole district-level employee dedicated full-time to integrating technology into instruction. The rollout of the 1-to-1 project, teacher training, and researching education applications have recently consumed most of his time. The TOSA reports spending up to 15 hours per week preparing for teacher training, researching education software and applications in anticipation of the 1-to-1 iPad project. Phase one teachers received their laptops and have been offered training during the summer in the basic Apple instructional applications such as iMovie, but the number of workshops has been extremely limited given the amount of preparation time cited by the TOSA. The TOSA's efforts are performed without clear coordination with the IT director, resulting in conflicting priorities for both.

The district lacks a documented plan on using technology to improve student learning. Also lacking is the leadership to create the framework for this plan and bring together the appropriate educational and technology leaders to develop it. No single position in the district has taken this leadership role.

Although an increase is anticipated in the number and types of online resources that will become available to students with their mobile devices, the district lacks an evaluation method for measuring the effectiveness of the devices for improving student outcomes.

Recommendations

The district should:

1. The district should establish a method for evaluating the success of the 1-to-1 program for students after the initial distribution. An up-to-date technology plan should include an evaluation.
2. Alter the TOSA position to incorporate more educational technology coordinator responsibilities such as being a strong leader who can efficiently use the skills and knowledge of technology lead teachers at the sites and also regularly communicate and collaborate with the district administration, data, assessment and systems staff, technical support and network staff to align all educational technology activ-

ities. The organizational structure has portions of administrative and educational systems and technology support services falling within different divisions and departments. A strong leader is required to bring everyone together to achieve an agreed-upon set of goals and objectives for educational technology implementation and support.

3. Reassign the TOSA position to report to the new CTO position to improve delivery of services from both positions.
4. The district should update the expired technology plan. A current technology plan is a requirement for E-rate funding. Planning should include strategies for the technology support and technology integration components mentioned in these recommendations and provide opportunities to create a road map and address goal setting for the 1-to-1 initiative over the next three years. The plan should also clearly address support for iPad integration with the curriculum and how they will be used in the CAASPP. A technology plan would outline a common set of goals and objectives to measure progress.

Technology Lead Teachers

One teacher at each site is designated as a technology lead teacher and receives an annual stipend. Site staff rely on these teachers for first-level basic technology support (i.e. diagnostics and basic troubleshooting for hardware, software and connectivity) before forwarding the issue to the Technology Department. Technology lead teachers use the School Dude IT Direct system, and they are responsible for documenting service requests from staff and submitting them to the Technology Department through the system. These positions are full-time teachers and are most often not available to provide immediate technical assistance during instructional time.

The technology lead teachers technology support responsibilities are under the supervision of the assistant superintendent of educational services. Therefore, their responsibilities could include professional development, data analysis and assessment. In reality; however, their time is largely dedicated to minor technical support issues. Because these are the primary leaders for technology integration at the sites, the technology lead teachers are crucial to the success of the 1-to-1 initiative.

Readiness for 1-to-1 computing includes distribution and implementation of the devices and significant levels of support and ongoing teacher collaboration time and training. The selection and distribution/installment of devices and apps is just the beginning of the obstacles districts face when implementing 1-to-1 projects. Although teachers use their district MacBooks at home, the integration of technology into the curriculum and the meaningful use of technology by students will depend on teachers' confidence and experience with the students' mobile devices.

Recommendations

The district should:

1. Remove basic technology support of hardware, software and connectivity issues from the technology lead teachers' responsibilities. Because of these teachers' limited availability, the planned increase in devices, and expected increase in demand for assistance, the district should not rely on them for first level technology support. Basic technology support needs can more promptly and econom-

ically be met by classified technology support. This will allow technology lead teachers to focus on peer coaching and technology integration into instruction. This would contribute to fundamental changes in learning within the technology-enhanced, 1-to-1 classrooms. Without technical assistance, the technology lead teachers will be unable to focus on these critical components for classrooms.

2. After conducting appropriate training and orientation, allow all district staff to submit technology support requests into the School Dude IT Direct system. Use the data from the system to quantify the number of work requests and the time it takes to complete them. Use this data to determine if additional computer technician III positions are needed to provide adequate service to the district office and school sites.

Administrative Secretary for Educational Services

The duties related to the support of most instructional and assessment data systems have been assumed by the administrative secretary for educational services. This position manages the data for the online instructional and assessment systems, including Illuminate, easyCBM, and Dynamic Indicators of Basic Early Literacy Skills (DIBELS) among others. In addition, they provide support for California English Learners Development Test (CELDT), and physical fitness testing, and manage Apple IDs for the iPad Volume Purchasing Program (VPP).

These tasks require familiarity with data systems, extracts, and imports and close collaboration with the administrative secretary for administrative services and student records specialist who provides Aeries support. These are critical functions for the districts' use of educational data. Little documentation is available on the technical duties of this position, and one person performs the critical functions of this job with no backup.

As is the case of the administrative secretary of administrative services, the demands of supporting the data systems leave little time for secretarial support. As a result, the administrative support components of the position are a minimal part of the work day, leaving the assistant superintendent of educational services without a full-time assistant. The workload is somewhat seasonal, depending on the assessment calendar, but with the expected increase in the use of online resources and Web-based instructional systems, the need for support will be greater.

In the future, this function will require more time and attention as the teachers begin to utilize the additional technology in their classrooms. Several staff interviewed expressed interest in managing the data systems adequately and effectively using data for instruction. Decision-making will require teachers to have accurate, accessible, timely data about their students' progress in learning. Therefore, the importance of these responsibilities will continue to grow.

Recommendations

The district should:

1. Document the technical work processes performed by the administrative secretary for educational services to prevent disruptions in services in the case of staff turnover or extended absences.
2. Cross-train the administrative secretary of administrative services to use this documentation in the critical functions of the position.

Administrative Services

Assistant Superintendent of Administrative Services

The assistant superintendent of administrative services is ultimately responsible for the California Longitudinal Pupil Achievement Data System (CALPADS), the student information system (Aeries), attendance reporting, and the free and reduced lunch count. The position also oversees transportation, facilities (including network infrastructure, low-voltage cabling, and clocks), computer replacement and classroom modernizations related to technology integration.

Administrative Secretary for Administrative Services and Student Records Specialist

This position provides administrative and clerical support for the assistant superintendent of administrative services. Although not included in the job description, the duties also include CALPADS reporting, California Special Education Management Information System (CASEMIS) reporting, data support for California Assessment of Student Performance and Progress (CAASPP), child nutrition reporting, Aeries data quality, and Aeries training, including master schedule and assistance with Aeries report card templates. These duties consume approximately 80% of the available time, leaving 20% to perform administrative secretarial functions.

Lack of documentation of critical systems and procedures and reliance on one individual for the operation of the SIS and related state and federal reporting functions place the district at high risk. The information systems analyst provides high-level technical support for Aeries, but all end-user issues, training and reporting reside with this position.

As with the technology responsibilities of the administrative secretary for educational services, data processes and procedures are not documented, and one person performs the critical functions with no backup. As a result, the administrative support components of the position are a minimal part of the work day, leaving the assistant superintendent of administrative services without a full-time assistant.

This role is critical for accurate, timely, accessible data for teachers. The demands of Aeries support, reporting and training, and an anticipated increase in the use of iPad apps and online resources requiring data support, warrant a full-time data specialist (student information system/instructional data system) position. This new data specialist position could combine all data management functions under one position, and the administrative secretaries could serve as back up to that position, allowing the administrative secretaries of educational and administrative services to work within their job descriptions.

Recommendations

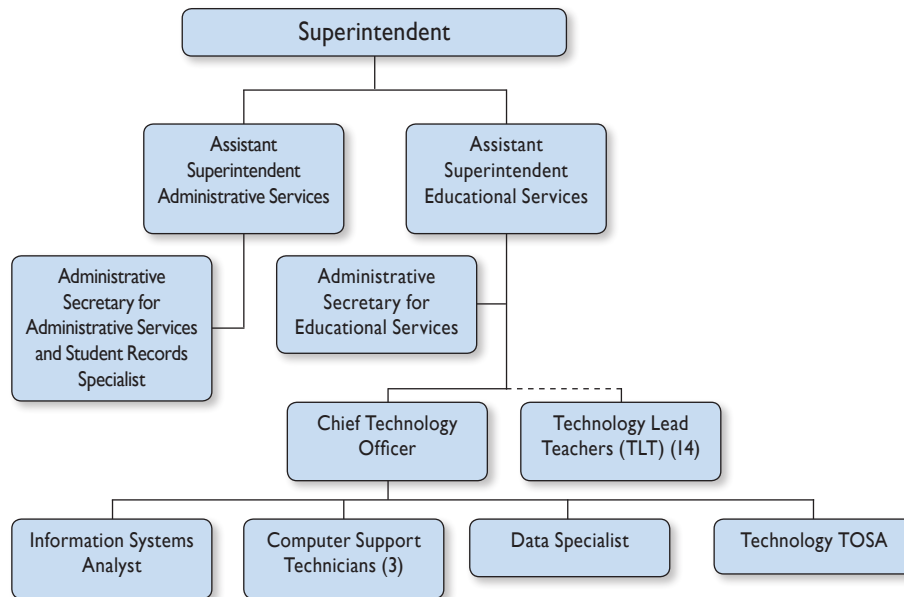
The district should:

1. Document the technical work processes performed by the administrative secretary for administrative services and student records specialist to prevent disruptions in services in case of staff turnover or extended absences.
2. Cross-train the administrative secretary of educational services to use this documentation in the critical functions of the position.
3. Create a new position of data specialist and assign this position all technology support performed by the administrative secretary of educational services and the administrative secretary for administrative services and student records specialist.

Assign the administrative secretaries to serve as backup to the data specialist using the documentation created by both positions.

4. Assign supervision of the data specialist position to the chief technology officer to better coordinate data support with the information systems analyst and to ensure best practices are followed for data management, backup, and recovery.

Reorganized Technology Support



FCMAT would like to thank the Buena Park School District staff for its cooperation during fieldwork and trusts that this management letter will help improve the efficiency and effectiveness of technology in the district. Please do not hesitate to contact us if we can be of any additional assistance.

Sincerely,

Scott Sexsmith

FCMAT Management Analyst