



Lamont School District

Technology Review

January 22, 2010

Joel D. Montero
Chief Executive Officer



CSIS California School Information Services

January 22, 2010

Cheryl McConaughey, Superintendent
Lamont School District
7915 Burgundy
Lamont, CA 93241

Dear Superintendent McConaughey:

In December 2008, the Lamont School District and the Fiscal Crisis and Management Assistance Team (FCMAT) entered into an agreement to provide a review of the district's technology programs and services. Specifically, the agreement states that FCMAT will perform the following:

1. Assess the district's student system data governance practices. Assist the District in developing policies and protocols for effective data management, assessment, and decision making. Provide recommendations for improvement.
2. Evaluate the district's overall technology network for both instruction and operations applications and provide recommendations to ensure customer satisfaction and operational efficiency.
3. Review the organizational structure, staffing levels, roles and responsibilities, and levels of supervision and evaluation within the Technology Department, and provide recommendations for improvements.

The attached report contains the study team's findings and recommendations.

On behalf of FCMAT we appreciate the opportunity to serve the district and extend our thanks to all the staff of the Lamont School District for their cooperation and assistance during fieldwork.

Sincerely,

Joel D. Montero
Chief Executive Officer

FCMAT

Joel D. Montero, Chief Executive Officer

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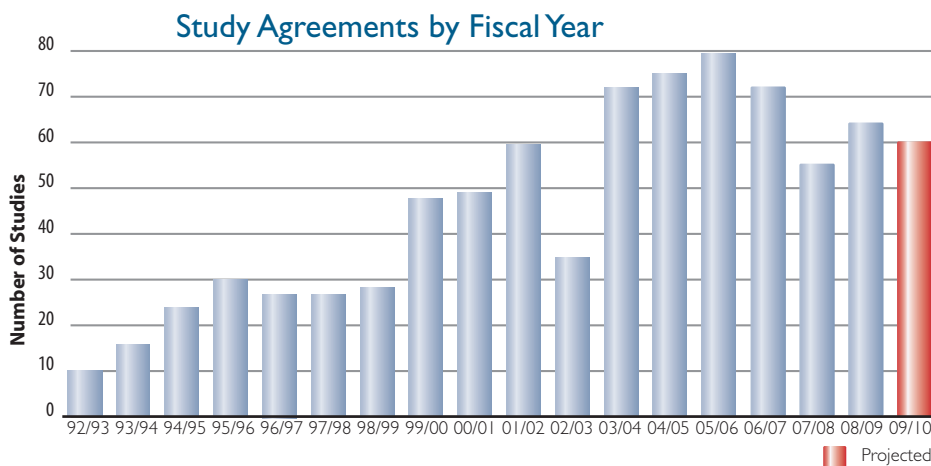
Foreword - FCMAT Background

The Fiscal Crisis and Management Assistance Team (FCMAT) was created by legislation in accordance with Assembly Bill 1200 in 1992 as a service to assist local educational agencies (LEAs) in complying with fiscal accountability standards.

AB 1200 was established from a need to ensure that LEAs throughout California were adequately prepared to meet and sustain their financial obligations. AB 1200 is also a statewide plan for county offices of education and school districts to work together on a local level to improve fiscal procedures and accountability standards. The legislation expanded the role of the county office in monitoring school districts under certain fiscal constraints to ensure these districts could meet their financial commitments on a multiyear basis. AB 2756 provides specific responsibilities to FCMAT with regard to districts that have received emergency state loans. These include comprehensive assessments in five major operational areas and periodic reports that identify the district's progress on the improvement plans.

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

Since 1992, FCMAT has been engaged to perform nearly 750 reviews for local educational agencies, including school districts, county offices of education, charter schools and community colleges. Services range from fiscal crisis intervention to management review and assistance. FCMAT also provides professional development training. The Kern County Superintendent of Schools is the administrative agent for FCMAT. The agency is guided under the leadership of Joel D. Montero, Chief Executive Officer, with funding derived through appropriations in the state budget and a modest fee schedule for charges to requesting agencies.



Total Number of Studies.....743

Total Number of Districts in CA 982

- Management Assistance..... 705 (94.886%)
- Fiscal Crisis/Emergency.....38 (5.114%)

Note: Some districts had multiple studies.

- Districts (7) that have received emergency loans from the state. (Rev. 1/22/09)

Introduction

Background

Located southeast of Bakersfield, the Lamont School District provides educational services to 2,700 students attending one middle school and three elementary school sites.

In December 2008, the district requested that the Fiscal Crisis and Management Assistance Team (FCMAT) review its technology, programs and services. The study agreement specifies that FCMAT will perform the following:

1. Assess the district's student system data governance practices. Assist the district in developing policies and protocols for effective data management, assessment, and decision making. Provide recommendations for improvement.
2. Evaluate the district's overall technology network for both instruction and operations applications and provide recommendations to ensure customer satisfaction and operational efficiency.
3. Review the organizational structure, staffing levels, roles and responsibilities, and levels of supervision and evaluation within the Technology Department, and provide recommendations for improvements.

Study Guidelines

FCMAT visited the district on June 9, 2009 to conduct interviews, collect data and review documents. This report is the result of those activities and is divided into the following sections:

- I. Executive Summary
- II. Organizational Structure and Staffing
- III. Technology Infrastructure and Support
- IV. Data Governance and Procedures
- V. Appendices

Study Team

The study team was composed of the following members:

Andrew Prestage
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Bakersfield, CA

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Interim Director of Technology Services
Monterey County Office of Education
Monterey, CA

Leonel Martínez
FCMAT Public Information Specialist
Bakersfield, CA

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

Executive Summary

Organizational Structure and Staffing

The Lamont School District's three technology support staff members report to the director of maintenance, operations, transportation, and technology. Although this staffing and reporting arrangement has functioned adequately for the past few years, the Technology Department has begun to lose credibility with its customers due to ongoing system problems related to poor implementation and planning.

At the time of fieldwork, the district's technology committee had been meeting but not functioning effectively. District administrators and technology committee members acknowledge the lack of an effective committee and recognize that some of the committee's concerns would not be resolved until receipt of the FCMAT report. The lack of an effectively functioning committee that meets regularly makes it difficult to align technology efforts with district goals and objectives. Therefore, the district should perform the following:

- Consider reclassifying the director of maintenance, operations, transportation and technology as director of maintenance, operations, and transportation (MOT).
- Create a new department titled Technology and Information Services (TIS).
- Assign administrative responsibility for the district's TIS Department to the assistant superintendent of business and personnel and the assistant superintendent of curriculum and instruction.
- Establish a new Technology Steering Committee (TSC) to address issues related to the direction and implementation of district technology. The superintendent should be considered a member, but may not be able to attend regularly and should be able to participate if needed.

Technology Infrastructure and Support

The district has been very successful in obtaining technology funding from the federal E-Rate funding program. As a result the district's network infrastructure is robust.

Users described the Technology Department work environment as one where employees do not work cohesively and smoothly as a single unit. There is little collaboration among staff members and insufficient communication between the director and other groups on technology initiatives. Users have grown dissatisfied with the level of service provided by the department and their prioritization of projects. There is a perception among users that the Technology Department does not effectively support the district's learning goals and objectives.

District administrators indicated that there is growing interest among teachers to use technology to support instruction. Administrators understand the need for professional development opportunities to support this interest and are eager to move forward with this initiative. Given these factors, the district should complete the following:

- Review the criteria used to determine the order for responding to technology support requests. The district should also assign the Technology Steering Committee to review the prioritization method to ensure that support services are delivered systematically.
- Begin assigning the network administrator a more active network leadership role.
- Continue to invest in desktop virtualization technologies as funds become available.
- Consider implementing a technology lead teacher (TLT) program.
- Invite the representative from CTAP to give a presentation to the Technology Steering Committee regarding the types of services that can be provided.

Data Governance and Procedures

Of the district's various student data systems, the student information system (SIS) is the most complex. Despite this, a single employee is almost solely responsible for supporting this critical system component. Cross-training is imperative to ensure the uninterrupted operation of this system.

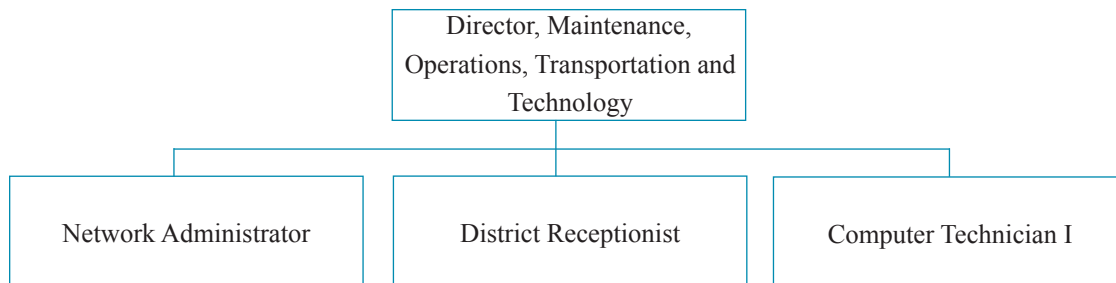
- Immediately take steps to cross-train the office specialist and other staff members as identified by administration in student information system functions.
- Develop a desk manual for SIS support functions.
- Consider creating a data specialist technician position.

FCMAT believes that the district will be better able to successfully integrate technology into the curriculum and improve the delivery of technology support services by implementing the recommendations contained within this report.

Findings and Recommendations

Organizational Structure and Staffing

The Lamont School District's three technology support staff members report to the director of maintenance, operations, transportation, and technology (MOTT). The organizational structure for technology support services staff is depicted below.



Management and Leadership

An effective technology department, when provided with appropriate input from a steering committee, should support the overall goals and objectives of the district by providing leadership, guidance, and support in the use of technology. To be successful, the technology leader must work collaboratively with employees at all levels and sites. The director must be adept at establishing relationships, understanding priorities, working with limited financial and personnel resources, and applying those resources effectively to achieve desired outcomes. However, the Technology Department has recently begun to lose credibility with its customers due to ongoing system problems generally related to poor implementation and planning.

One example of poor implementation management was when the Technology Department staff recently installed Microsoft Office 2007 on all district computers. After installation, many users reported system problems and repeated “crashing” of computers. Analysis of the underlying reasons for the problems revealed that additional memory and/or hard drives are needed to successfully run Office 2007. A clearer understanding of minimum system requirements would have prevented many of the problems from occurring. However, site staff members perceived that the Technology Department was reluctant to assume responsibility for these issues.

The following general guidelines represent a “best practices” approach to implementing software:

1. Conduct a needs assessment among users to determine whether the upgrade is really needed, wanted, and justified.

2. Conduct a preassessment of all affected systems to determine if they meet minimum system specifications for memory and hard disk requirements associated with the new software.
3. Identify a “pilot site” where the new software can be tested prior to moving forward with district-wide implementation.
4. Assess the results of the pilot site test, make necessary adjustments, and proceed with other pilot sites or district-wide implementation.

A second example was when a change was made to the district’s Aeries student information system one day before the start of school. The resulting problems introduced additional difficulties and an unfamiliar system during a critical and already hectic time.

The change may have been required leaving the district with no alternative but to implement it the day before the start of school. However, Aeries typically releases updates and gives districts a period of time in which to schedule installation. With this in mind, a best practices approach to implementing system changes would be to:

1. Be attentive to the type and reason for patches and updates.
2. Review newly released system updates promptly to determine if they contain a feature or patch that is critically needed.
3. Schedule the installation of updates at times that result in the least possible impact on users.
4. Inform users in advance of anticipated impacts associated with the update.
5. Be prepared to roll back to the prior version in the event of unforeseen problems.

During interviews, users described the work environment of the Technology Department as one where employees argue rather than working cohesively and smoothly. Technology support staff members indicated that department meetings are not conducted. Instead, the director meets with individual staff members and occasionally in small groups pertaining to daily and short-term issues, but does not provide a forum with all staff members for discussions related to interoperability, long-term planning, overall district objectives, or consensus building. This has created an environment of poor staff collaboration, poor planning, lack of organized support, poor communication with other groups, and a perception among users that the Technology Department does not effectively support the district’s learning goals and objectives.

Technology Committee

The lack of an active committee that meets regularly to provide oversight and guidance to the Technology Department makes it impossible to align technology efforts with the district’s goals and objectives. In addition, users are dissatisfied with the level of service provided by the department and its prioritization of projects.

Staff Evaluations and Absences

All school district staff members should receive an annual evaluation consistent with the terms outlined in union contracts and district policy regarding their work performance to provide feedback and an opportunity for professional growth. However, there was no agreement between the director of MOTT and support staff members regarding the performance of annual evaluations.

The lack of a formal and consistent employee evaluation process and regular feedback appears to have created an environment where staff members are not working collaboratively. Several staff members commented that employees don't work in synchronization with each other and sometimes work at odds with each other.

Several staff members expressed frustration regarding problems that occurred when technology staff members were allowed to take vacation during the first few weeks of school. This resulted in problems that could easily have been avoided. Technology support staff members' requests for vacation during the first and last three weeks of school should be carefully analyzed to minimize potential problems during these critical periods. In addition, absence requests for the two weeks prior to the start of school should be reviewed to ensure that the absence will not have an adverse effect on the start of the school year.

Recommendations

The district should:

1. Consider reclassifying the director of maintenance, operations, transportation and technology as director of maintenance, operations, and transportation (MOT). This will allow the director to focus on the district's daily MOT functions without the frequent distractions associated with technology management and support.
2. Create a new department titled Technology and Information Services (TIS). The TIS Department should be comprised of the network administrator and computer technician I positions.
3. Assign administrative responsibility for the district's TIS Department to the assistant superintendent of business and personnel. All TIS staff members should report directly to the assistant superintendent.
4. Ensure that department meetings for all technology support staff members are conducted at least once a month. Staff members should be invited to submit agenda items for meetings several days before each meeting. A printed agenda should be distributed and used as a record of what topics were discussed at each meeting. Regular meetings will help keep support staff better informed on organizational objectives so they can better understand the changing support requirements associated with those objectives.

5. Establish a new Technology Steering Committee to address issues related to the direction and implementation of district technology. The committee should be comprised of representatives from all client populations including instruction, business, administration, student information systems, technology services, and other end-users. The committee should meet monthly for the first few months to establish meeting procedures, standards, and objectives. After this period, the committee should meet as least quarterly to maintain itself as an effective working group. The committee's goals should be as follows:
 - Prioritize the fiscal and personnel resources of the Technology Department.
 - Establish short- and long-term goals for the use of technology by creating a districtwide technology plan.
 - Review the progress of technology support staff members in supporting goals established in the plan and make recommendations for changes.
 - Ensure that a smooth integration occurs in the application of technology to support teaching and learning.
 - Develop standards for hardware and software including electronic learning resources to be used in classrooms.
6. Ensure that each principal designates up to two staff members to serve as liaisons and representatives of the school site on the technology committee. Ideally, the liaisons should include a representative from the certificated and classified employee groups. Liaisons should be appointed rather than volunteer to ensure that the correct individuals comprise the committee.
7. Assign the committee to evaluate and monitor the implementation of technology, share and articulate information, among schools and suggest revisions to the district's technology plan.
8. Assign school sites to develop school site technology plans that support the district plan.
9. Ensure that all employees are evaluated consistent with the terms outlined in union contracts and district policy. Most districts conduct employee evaluations annually or semiannually. Annual goals and objectives should be included in evaluations. Providing regular evaluations will allow for feedback and guidance to employees on district expectations and employee performance.

10. Carefully review technology support staff member requests for vacation during the first and last three weeks of school to minimize potential problems during these critical periods. In addition, absence requests for the two weeks prior to the start of school should be reviewed to ensure that the absence will not have an adverse effect on the start of the school year.

Technology Infrastructure and Support

Technology support requests are maintained via the district's scheduling, help desk, and work order management system (SchoolDude). The network administrator and computer technician I provide support services to the district office, four school sites, and employees in programs such as migrant education, the family center, student services and special education. The network administrator and computer technician work independently of each other.

The director of MOTT meets with the network administrator and computer technician each morning to review and prioritize support requests. During interviews, technology support staff indicated that support requests are prioritized in the following order:

1. Administration
2. The district office
3. Teachers
4. Students

The district should review the criteria used to determine the order for responding to technology support requests. The Technology Steering Committee should be assigned to review the prioritization method to ensure that support services are delivered systematically. In making these decisions, the committee should consider urgency versus importance.

Some users become very vocal in the hopes of receiving priority support. Too often, less experienced technology staff members respond to the most vocal users in the mistaken belief that their support requests are more urgent. However, effective prioritization of support requests requires a combination of seasoned experience, understanding, and judgment. Frequently, site administrators can provide guidance in regarding the true level of urgency of support requests because they have the best understanding of calendar events, testing, home to school communications, and general lesson planning. The Technology Steering Committee should respond to technology support requests and prioritize support requirements.

Network Administrator

The network administrator provides hardware and software support, and has no leadership or administrative responsibilities for technology support functions. The major responsibilities of the network administrator include the following:

- Data backups
- Aeries student information system maintenance and database administration
- Monitoring systems and network infrastructure including routers and switches

- Server maintenance and administration
- Software support for various network learning resources
- Support and maintenance of the voice-over-internet protocol (VoIP) telephone system, video distribution, e-mail, fire walls, and wireless network access points

Computer Technician

The computer technician supports approximately 500 desktop and 120 laptop computers districtwide. Common computer-technician ratios in K-12 range from 500 to 800 to one. Therefore, the district's computer-to-technician ratio is appropriate. Support services are rendered to school sites based on a two-day rotation for each school site.

Major responsibilities of the computer technician include the following:

- Responding to technology support requests from users at the school sites, district office, and other district programs
- Addressing day-to-day problems and projects that occur with desktop systems including Microsoft Windows and Office application upgrades
- Installing and configuring network access
- Assisting with printer configurations and e-mail access problem

The district lacks standards for the delivery of technology service and support. Technology support/operations policies should be developed to include the following:

Ideally, technology support/operations policies should be developed, to include the following:

- All telephone calls to the technology department will be answered by a staff member rather than by voice mail.
- All e-mail support requests to the technology department will be responded to within 30 minutes of receipt of the e-mail.
- The use of voice mail will be permitted only if desired by the caller and after the caller has been presented with other support alternatives.
- Every attempt shall be made to resolve support requests at the time of first contact from the user.
- Technology department loaned equipment shall be installed and operating within 24 hours of first contact from the user.
- Technology support staff members will let users know when work is to be performed, what work is done, and problem resolution status.
- If a personal update cannot be provided to the user, the technology support staff member will leave a detailed note or provide a status update to the office staff prior to leaving a site. In addition, a follow-up e-mail message explaining the reason(s) for not providing support shall be sent to the appropriate site administrator with copies sent to the assistant superintendents.

- Technology support staff members will check in with the site office staff upon arrival, and request information on the items that require attention. They will also check out with the site office staff prior to leaving, and provide an update on problems that have and have not been resolved, and what is being done to correct the remaining problem(s).
- Prior to the end of their daily shift, technology support staff members will send an e-mail message to the appropriate site administrator summarizing support activities performed and problems resolved for that day.
- Any planned support activity that requires bringing down a server or other communications equipment shall be preceded by a message informing users of the planned outage duration at least one week in advance of the planned outage.
- Planned network outages shall be preceded by three broadcast network messages: 1) four hours prior; 2) one hour prior, and; 3) five minutes prior to the outage.
- Any unplanned support activity that requires downing a server or other communications equipment shall be preceded by at least three broadcast network messages informing users of the emergency outage and estimated duration.

Desktop Virtualization

In 2007, the district began investing in desktop virtualization to help meet the demand for additional classroom computers with an increasingly limited budget. Desktop virtualization extends the district's technology investment by making it possible to connect several screens, keyboards, and mice to a single desktop computer so that it can be simultaneously shared by many students. This has significantly reduced the district's hardware costs, helped to simplify and standardize hardware and software, and reduced the overall cost of supporting technology.

Communications and Disruptions

Many users complained that technology staff members do not provide advance warning regarding the disruptions involved in upgrades, repairs, and implementation of new technologies. Users also indicated that the outages typically occur at a time of day when many users are adversely affected. Examples included student information system disruptions, network access outages, and desktop maintenance activities.

Computer Security and Standardization

Several users mentioned concerns regarding desktop computer security and the degree to which the Technology Department staff made decisions on desktop security criteria without consulting with other employee groups.

As a best practice, most districts compile a list of the standard applications to be installed on new computers. This allows technology support staff to create an “image” (i.e. digital copy) that contains the operating system and various applications required. Creating an image increases efficiency by reducing the amount of time required to configure new systems. Districts generally create a unique image for each school site since applications requirements can differ.

The district has not clearly defined what software applications a standard software image will contain for each site. The lack of an image containing a standard list of software applications for each site creates significant additional workload for the computer technician. The district also lacks network standards. The development of network standards would address standardization of the speed at which classroom computers can communicate (e.g. one gigabyte per second or 100 megabytes per second) and the number of network connections in each classroom.

Acceptable Use Policies

Some employees have not signed an acceptable usage policy (AUP). The district’s AUP is out of date and employees are not required to sign it annually. An AUP is a document that defines guidelines that protect employees and the district from problems associated with inappropriate use of computer and network resources.

Web Filtering

The district’s Internet content-filtering system is managed by the network administrator. Most of the filter settings are the default ones from when the product was first installed. Some users are concerned about these settings and want to help determine appropriate ones for the district.

Password Change Management

At present, only the network administrator can reset user passwords. When the computer technician is assisting a user with a password problem, a support ticket must be generated for the network administrator to make the required change. This causes unnecessary delay in resolving the problem and results in a duplication of efforts.

Outsourcing

The district contracts with outside vendors for support of the wide- and local-area networks, video distribution system, and telephone system. This is a practical use of contracted support given the complexity of the systems and relatively small technology support staff of the district. When possible, funding for support of these systems is obtained through the E-Rate federal funding and discount program.

Educational Technology

During interviews, district administrators indicated that the district's teachers and students are ready for a more aggressive integration of technology and proven teaching practices to enhance teaching and learning. Administrators commented that the district is ready to incorporate additional technology and clearly understands that consistent professional development opportunities must be made available for the instructional staff.

To address the need for professional development in educational technology, many districts have implemented a technology lead teacher program. Consisting of a highly trained teacher at each site, the program would provide participants with additional training in hardware, software, and technology integration strategies. Technology lead teachers train other teachers in best practices related to technology use and integration.

The technology support staff commented that educational technology products including software systems are sometimes purchased without input from the Technology Department. This can result in problems related to implementation and support if the products being purchased are incompatible with or the requirements exceed the performance capabilities of existing systems. Best practices suggest that all purchases for technology (hardware or software) be routed through the Technology Steering Committee for review and approval prior to creating a purchase order. All technology purchases should be based on a strong educational purpose and should show how the purchase will affect student learning.

For three years, under a grant, the district has funded one FTE instructional position to provide professional development, data analysis, and instructional technology support to users districtwide. Smaller school districts such as Lamont typically do not have full-time educational technology support staff at the district office. The California Technology Assistance Project (CTAP) was created for this reason.

Several administrators indicated a desire to establish a standard that would place a smart board in every classroom. A smart board is an interactive, electronic whiteboard that can enhance instruction and learning.

Recommendations

The district should:

1. Review the criteria used to establish the order for responding to technology support requests. The Technology Steering Committee should review the prioritization method to ensure that support services are delivered systematically. Careful consideration and understanding of environmental factors is needed to effectively balance support delivery between instructional and administrative users. Committee discussion is important to achieving agreement on the process.

2. Begin assigning the network administrator a more active network leadership role. The network administrator should be encouraged to apply to the Chief Technology Officer (CTO) Mentor Program. The program teaches leadership, project planning, budgeting, support for educational technology initiatives, and other responsibilities of technology leaders. Additional information on the program can be found online at <http://www.cetpa-k12.org/pub/htdocs/cto.html>. Developing leadership skills in the TIS Department will help the department function more effectively and independently.
3. Continue to invest in desktop virtualization technologies as funds become available.
4. Develop procedures to improve communication with users regarding scheduled system disruptions and outages. When possible, an e-mail message should be sent to affected users in advance of any work notifying them of the pending disruption. Faxes should be used as an alternative communication method if the e-mail system is not available. E-mail sent to users notifying them of system changes and possible disruptions should include a consistent message subject line such as <Technology Bulletin> so that users can easily recognize them.
5. Schedule any work that is expected to create a system disruption or outage for a time when sites, teachers, and students are not using the system. If it is not possible to schedule the service disruption during nonpeak usage hours, adequate notification should be provided well in advance via e-mail or faxes.
6. Assign the Technology Steering Committee to review the desktop security implementation criteria. The committee will need to balance the needs of users against the need to provide a secure and reliable networking environment. The outcome of the review should be drafted into board policy and administrative regulation procedure documents and shared with all users.
7. Assign the Technology Steering Committee to review and update the acceptable use policy. The AUP should be updated annually to reflect emerging trends in technology. The new AUP should be reviewed by district counsel and submitted for board approval.
8. Require employees to sign an AUP every year along with the other forms that are administered annually by the personnel department. Typically, districts will provide a single signature page allowing employees to indicate acceptance of the referenced forms, terms and conditions. The district cannot effectively take disciplinary action against employees who have not signed an AUP and who have fraudulently or inappropriately used electronic resources because the employee can correctly claim that no guidelines for appropriate use were formally established or agreed to. Good examples of acceptable use policies can be found online at:

http://tis-capousd-ca.schoolloop.com/cms/page_view?d=x&piid=&vpid=1235192975757

9. Assign the Technology Steering Committee to establish a subcommittee to review the configuration of the district's Internet content filter. Procedures should be developed that provide guidelines for altering filter settings, who is responsible for determining changes, and who is responsible for implementing changes. Incorporating input from teachers and curriculum leaders in the district will be essential to establishing and supporting filter settings.
10. Extend password management capabilities to the computer technician to further increase efficiency. This will allow the computer technician to directly resolve user password issues.
11. Continue the practice of contracting with outside vendors for support of the wide- and local-area networks, video distribution system, and telephone system.
12. Consider implementing a technology lead teacher program. If the district opts to implement this recommendation, these teachers should meet monthly to discuss trends and receive additional training opportunities. Teachers selected to participate in the program should be curriculum leaders in the core academic areas, possess a basic understanding of how to use technology, and have demonstrated ability to utilize technology in the classroom. The goal of the program should be to build a cadre of teachers who are strong in the core curriculum and who use technology to effectively enhance instruction and learning. Though they will receive some training in hardware and software troubleshooting, they will not be the technicians at a school. For this program to be successful, TLT staff members must be working on instruction and the integration of technology. For information about how to establish a TLT program, contact Susan Holiday, director of educational technology, Capistrano Unified School District, at (949) 234-9463 or seholliday@capousd.org.
13. Ensure all technology purchases, including those for curriculum and instruction purposes, are reviewed prior to acquisition. This will lead to easier implementations, reliable ongoing support of the product, and improved compatibility with existing technology infrastructure. The Technology Steering Committee is an ideal place to discuss short- and long-term goals related to technology acquisition as well as adopting hardware and software standards that will make review of educational technology purchases much smoother.
14. Invite the representative from CTAP to give a presentation to the Technology Steering Committee regarding the types of services that can be provided. The administrative contact for the CTAP office nearest the Lamont School District is Kelly Bergen (kebergen@kern.org, (661) 636-4644, <http://www.ctap8.org>).

15. Assign the Technology Steering Committee to consider the standard to place a smart board in every classroom. If the committee opts to adopt this standard, it should also define clear instructional goals associated with the purchase. The committee's decision regarding the integration of smart boards into the curriculum should be linked common formative assessments and empirical data that clearly indicate improvements in teaching and learning.

Data Governance and Procedures

Data governance is defined as a quality control discipline for assessing, managing, using, improving, monitoring, maintaining, and protecting organizational information. It is a system of decision rights and accountabilities for information-related processes, executed according to agreed-upon models that describe who can take what actions with information.

The first step in assessing the district's instructional data governance is to identify the organization's data assets and the data managers who have primary responsibility for the use, accuracy, and maintenance of the data. For the district, these functions are performed through a combination of teachers on special assignment (TOSA) and district office staff.

Teachers on Special Assignment (TOSA)

Major responsibilities of the TOSA include the following:

- Professional development for certificated staff
- Modeling instruction and lesson plans that integrate technology and standards-based learning
- Assisting teachers with the proper use of technology equipment and software to improve teaching and learning
- Performing data analysis on the district's assessment management system (Edusoft)
- Working with grade and site level data teams
- Providing information on research-based, electronic learning resources

Office Specialist

The office specialist reports to the TOSA and the Assistant Superintendent of Curriculum and Instruction and provides a variety of professional development, student assessment, and student information system support functions. Major responsibilities of the office specialist include:

- Creating reports, assessments, installing system updates and managing staff accounts (Edusoft)
- Creating reports and installing system updates (Online Assessment Reporting System - OARS)
- Running queries, exporting data into Edusoft and OARS used for updates
- Enrolling new students, managing student and staff passwords and accounts (Accelerated Reader)
- Enrolling new students, managing student and staff passwords and accounts (Accelerated Math)

- Enrolling new students, managing student and staff passwords and accounts (Houghton Mifflin Online Assessment System - HMOAS)
- Pulling tests to create in Edusoft, enrolling new students, managing student and staff passwords and accounts (Eduplace)
- Scanning student Scantron sheets into the system for upload to Edusoft (Edusoft Grader)
- Gathering data, working with grant center office manager to find failing grades, generating letters to notify parents (At Risk of Retention - AROR)
- Pulling reports, disaggregating data

District Receptionist

The district receptionist is a confidential position reporting to the assistant superintendent of business and personnel. Duties and functions performed by the district receptionist are almost exclusively associated with the student information system. For efficacy and business continuity reasons, most districts prefer to assign responsibility for student information system support to more than one staff member and level of job classification. Major responsibilities of the district receptionist include the following:

- Running attendance audit checks
- Running weekly and monthly attendance reports
- Running P1, P2 and annual attendance reports
- Running queries and making data verifications
- Working with other administrators on items such as lunch applications to ensure that free and reduced lunch counts are accurate
- Performing California Basic Educational Data System (CBEDS) reporting
- Producing expulsion packets, required processing, and follow-up activities
- Processing inter-district and intra-district transfers
- Coordinating master scheduling for one middle school
- Assigning and maintaining Statewide Student Identifiers
- Maintaining all data to be reported to the California Pupil Achievement Data System (CALPADS) and the Online Public Update for Schools (OPUS) necessary to comply with No Child Left Behind reporting requirements

Of the various systems supported by the TOSA, office specialist, and district receptionist, the Aeries student information system is easily the most complex. Despite this, a lack of technology leadership and oversight has resulted in an environment where a single employee is almost solely responsible for supporting this critical system component. Other staff members have received little cross-training that would enable them to support

and maintain the SIS. An SIS desk manual has not been developed that details the various tasks, functions, and deadlines associated with SIS support. Given the importance student information system data and the potential for problems arising from a possible extended absence of the district receptionist due to illness, the lack of cross-training puts the district in a precarious and untenable position.

Recommendations

The district should:

1. Immediately take steps to cross-train the office specialist and other identified staff members in student information system functions. The office specialist has already attended Aeries SIS training and possesses a fundamental understanding of SIS functionality. A formal and documented process should be established together with a time line for the cross-training. A portion of the office specialist's and district receptionist's evaluations should address the progress being made in the effort to cross train.
2. Develop a desk manual for SIS support functions. The SIS desk manual should detail all the various SIS functions, duties, deadlines, reporting requirements, and procedures for interfacing with external systems.
3. Consider establishing a data specialist technician position. The data specialist technician should report directly to the teacher on special assignment. In addition to duties already performed, the technician should be fully cross-trained in SIS support and assume a greater role in SIS maintenance. A sample data specialist technician job description is attached as Appendix B.
4. Assign the data specialist technician with responsibility for all external reporting requirements associated with systems such as the California School Information Services (CSIS), CALPADS, and the California Basic Enrollment Data (CBEDS). The responsibilities for these services will be completed jointly with the assistant superintendent of instructional services and the project manager for categorical programs.
5. Assign the data specialist technician to begin to participate in the meetings and training sessions that the district receptionist is currently overseeing and conducting so that cross-training can occur. The data specialist should develop a formal time line, including milestones, to achieve cross-training objectives.

6. Assign selected staff members to obtain further online training through the FCMAT/CSIS E-Learning Center. Additional information regarding online training opportunities can be found online at <http://www.csis.k12.ca.us/e-learning>. Taking advantage of Web-based training opportunities such as the E-Learning Center eliminates the costs of travel and accommodations. This will ensure that the data specialist technician remains available to other employees on site.

Appendices

Appendix A

Sample Job Description

Data Specialist Technician

ESSENTIAL FUNCTIONS

Under the direction and supervision of the Teacher on Special Assignment, the Data Specialist Technician is responsible for input and data management of accurate information related to the district's information systems and databases. This position will work in support of the Curriculum and Instruction Division to develop reports, input data, and assist administrators and instructional staff.

DUTIES AND RESPONSIBILITIES

- Coordinates with other district departments to verify accuracy of student information in the district's various student data systems including Aeries, Edusoft, OARS, Accelerated Reader, Accelerated Math, HMOAS, Eduplace, Edusoft Grader, etc.
- Ensures data integrity by following district and state data standards and performing routine data verification and system update activities.
- Creates student access and account lists for creation of new student accounts at the beginning of each school year.
- Runs weekly rostering data from the Aeries SIS.
- Performs a variety of routine clerical functions such as answering telephones, processing forms, filing, copying and ordering supplies pertaining to areas of responsibility.
- Implements and maintains database systems in accordance with areas of responsibility.
- Prepares exports from SIS into other databases.
- Perform imports and exports of data from one software program to another.
- Produces student achievement results from publisher and district prepared data, inputs data into various software programs for disaggregating information.
- On as needed basis, provides data entry and support services as required for special projects such as STAR and CSIS, etc.
- Refers problem situations to supervisor
- Perform other related duties as assigned



FISCAL CRISIS & MANAGEMENT ASSISTANCE TEAM
STUDY AGREEMENT
November 17, 2008

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

1. BASIS OF AGREEMENT

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

2. SCOPE OF THE WORK

A. Scope and Objectives of the Study

The scope and objectives of this study are to:

- 1) Assess the District's student system data governance practices. Assist the District in developing policies and protocols for effective data management, assessment, and decision making. Provide recommendations for improvement.
- 2) Evaluate the District's overall technology network for both instruction and operations applications and provide recommendations to ensure customer satisfaction and operational efficiency.
- 3) Review the organizational structure, staffing levels, roles and responsibilities, and levels of supervision and evaluation within the Technology Department, and provide recommendations for improvements.

4. PROJECT COSTS

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

- A. \$500.00 per day for each Team Member while on site, conducting fieldwork at other locations, preparing and presenting reports, or participating in meetings.
- B. All out-of-pocket expenses, including travel, meals, lodging, etc. The District will be billed for the daily rate and expenses of the independent consultant, only. Based on the elements noted in section 2 A, the total cost of the study is estimated at \$3,500. The District will be invoiced at actual costs, with 50% of the estimated cost due following the completion of the on-site review and the remaining amount due upon acceptance of the final report by the District.
- C. Any change to the scope will affect the estimate of total cost.

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

5. RESPONSIBILITIES OF THE DISTRICT

- A. The District will provide office and conference room space while on-site reviews are in progress.
- B. The District will provide the following (if requested):
 - 1) A map of the local area
 - 2) Existing policies, regulations and prior reports addressing the study request
 - 3) Current organizational charts
 - 4) Current and four (4) prior year's audit reports
 - 5) Any documents requested on a supplemental listing
- C. The District Administration will review a preliminary draft copy of the study. Any comments regarding the accuracy of the data presented in the report or the practicability of the recommendations will be reviewed with the Team prior to completion of the final report.

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

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 procedures of the Team and on 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) Progress Reports - 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 - The Team will issue an exit letter approximately 10 days after the exit meeting detailing significant findings and recommendations to date and memorializing the topics discussed in the exit meeting.
- 5) Draft Reports - Sufficient copies of a preliminary draft report will be delivered to the District administration for review and comment.
- 6) Final Report - Sufficient copies of the final study report will be delivered to the District following completion of the review.
- 7) Follow-Up Support – Six months after the completion of the study, FCMAT will return to the District, if requested, to confirm the District's progress in implementing the recommendations included in the report, at no costs. Status of the recommendations will be documented to the District in a FCMAT Management Letter.

3. PROJECT PERSONNEL

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

- A. Andrew Prestage, FCMAT Management Analyst
- B. Darryl LaGace, FCMAT Technology Consultant

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

6. PROJECT SCHEDULE

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

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

7. CONTACT PERSON

Please print name of contact person: Cheryl McConaughy

Telephone (661) 845-0751 Ext 223 FAX (661) 845-0689

Email Address cmcconaughy@lesd.us

Cheryl McConaughy 12/18/08
Cheryl McConaughy, Superintendent Date
Lamont Elementary School District

Barbara Dean
Barbara Dean, Deputy Administrative Officer Date
Fiscal Crisis and Management Assistance Team

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