



## **Irvine Unified School District Technology and Payroll Department Review**

March 8, 2010

Joel D. Montero  
Chief Executive Officer





March 8, 2010

Gwen Gross, Ph.D., Superintendent  
Irvine Union School District  
5050 Barranca Parkway  
Irvine, CA 92604

Dear Superintendent Gross:

In September 2009, the Irvine Unified School District entered into a study agreement with the Fiscal Crisis and Management Assistance Team (FCMAT) for FCMAT to perform the following:

1. Review the district's payroll department with respect to its organizational structure, staffing, workload/workflow and compliance issues and make recommendations for improvement.
2. Review the district's organizational structure for technology services support delivery and make recommendations for improvement.
3. Review the district's staffing for technology services delivery and make recommendations for improvement.
4. Review the district's delivery of instructional technology services and make recommendations for improvement.
5. Review the district's delivery of administrative technology services and make recommendations for improvement.
6. Review the district's data governance practices and make recommendations for improvements regarding state requirements, best practices, innovative ideas, and projected needs.

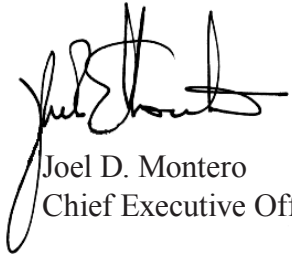
**FCMAT**

Joel D. Montero, Chief Executive Officer

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This report contains FCMAT'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 Irvine Unified School District for their cooperation and assistance during fieldwork.

Sincerely,

A handwritten signature in black ink, appearing to read "Joel D. Montero". The signature is stylized with a large initial "J" and a long horizontal stroke at the end.

Joel D. Montero  
Chief Executive Officer

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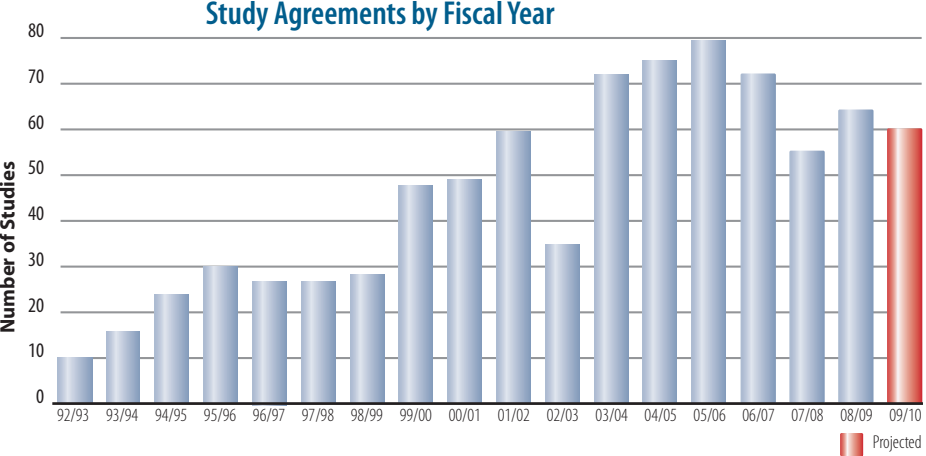
# Foreword - FCMAT Background

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.



<b>Total Number of Studies.....</b>	<b>743</b>
<b>Total Number of Districts in CA.....</b>	<b>1,050</b>
Management Assistance.....	705 (94.886%)
Fiscal Crisis/Emergency .....	38 (5.114%)
Note: Some districts had multiple studies.	
Eight (8) districts have received emergency loans from the state.	
(Rev. 12/8/09)	





# Introduction

## Background

Located in Orange County, the Irvine Unified School District serves approximately 26,500 students in kindergarten through 12th grade at 22 elementary, five middle and four comprehensive high schools. The district unified in 1972 and has schools that are nationally recognized for academic success, offering comprehensive programs in academics, the arts and athletics. While many school districts are continuing to decline in student enrollment, Irvine Unified's student enrollment increased by 5.3 percent during the past five years.

In August 2009, the district and the Fiscal Crisis and Management Assistance Team (FCMAT) entered into an agreement for FCMAT to perform the following:

1. Review the district's payroll department with respect to its organizational structure, staffing, workload/workflow and compliance issues and make recommendations for improvement.
2. Review the district's organizational structure for technology services support delivery and make recommendations for improvement.
3. Review the district's staffing for technology services delivery and make recommendations for improvement.
4. Review the district's delivery of instructional technology services and make recommendations for improvement.
5. Review the district's delivery of administrative technology services and make recommendations for improvement.
6. Review the district's data governance practices and make recommendations for improvements regarding state requirements, best practices, innovative ideas, and projected needs.

## Study Team

The FCMAT study team was composed of the following members:

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El Centro, CA

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Mission Viejo, CA

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

## Study Guidelines

FCMAT visited the district on October 7-8, and October 12-13, 2009 to conduct interviews, collect data and review documentation. This report is the result of those activities and is divided into the following sections:

- I. Executive Summary
- II. Technology Department
- III. Payroll Departmental Structure
- IV. Appendix

# Executive Summary

Over the past decade, one of the primary goals of the Irvine Unified School District has been to provide students and staff access to cutting-edge technology. However, ongoing fiscal crises and structural problems in the Technology Department have created a number of obstacles to meeting this goal.

The Technology Department's organizational structure is divided into Information Services (IS) and Information Technology (IT). The former superintendent, who retired in 2006, previously served as the assistant superintendent of education services and functioned as the de facto chief technology officer. When he became superintendent, his involvement in the technology department, leading staff and making departmental decisions, continued without interruption.

Technology goals for each director have been based on the responsibilities outlined in the district's administrative responsibilities chart. Goals for the department have been included in the Superintendent's goals and objectives since 2006-07. While a district technology plan exists, it is inadequate in addressing emerging needs. Further, neither department seems to clearly understand its role in implementing the plan or establishing and maintaining a common vision. This lack of vision has permeated to the site level, and employees throughout the organization perceive that the district has lost its edge regarding technology implementation.

The senior administration's goal is to better support classroom instructional needs by analyzing and restructuring the Technology Services Department. This reorganization should be accomplished under the direction of a newly created cabinet-level position of a chief technology officer. An updated technology master plan that defines the overall vision for technology is also needed. This comprehensive plan should guide the development of a collaborative communication framework between Education Services, Business Services and Technology Services.

## Technology Department

Since the founding of the district in 1972, Irvine Unified has embraced decentralized decision-making for school sites and departments. As the district grew, this decentralized model led to problems with the centralized functions, including technology leadership and implementation.

Decentralization also resulted in communication weaknesses between Information Services, Information Technology, district departments and school sites. A lack of integration between information platforms for hardware and software systems, and an inequitable workload between staff members has led to confusion regarding project accountability.

The district's organizational structure for technology services does not provide for effective communication, organizational pathways, or professional development support for the staff in the department. The two groups that make up the Technology Services Department are led by separate directors, one a former teacher in the district and the other a former principal. The IT director reports to the assistant superintendent of education services while the IS director reports to the superintendent. This type of divided management structure and workflow strategy is ineffective and results in a lack of coordination in the Technology Department.

Both directors have not demonstrated initiative regarding the district's direction for technology, which includes an integrated approach for administrative functions and student learning. This type of bifurcated organizational model does not provide continuity of direction and support for the department as a whole or meet district needs. The two technology groups have minimal strategies resulting in little ongoing or long-term planning for technology services. There is need for a structured process to coordinate the scope of work, reporting time lines, and resource allocation for technology projects.

The district lacks a system for administering, documenting, tracking and reporting the work performed throughout the department, including efforts at local schools.

#### **Local Area Network Administrators**

Because the district's technology service model is highly decentralized, a relatively small district-level staff provides support to site-based personnel. The model relies on what the district refers to as local-area network (LAN) administrators to provide site-based technology support. These LAN administrators do not have well-defined roles and responsibilities. The district has made an effort to define LAN administrators' job responsibilities and expectations, but the lack of standardization for skill levels and service delivery results in a disparate level of service and consistency from site to site.

#### **In-House Programming/Development Model**

The district maintains a workgroup committed to the development and support of complex enterprise systems. These positions have been established over time based on perceived needs in the district to develop and support custom applications, specifically related to human resources, payroll, and budgeting.

Two more common approaches to addressing these needs are 1) belonging to a consortium of subscribers from a county office that maintains programming and support staff to customize applications, or 2) researching and purchasing third-party applications that would meet the needs of the district. Either of these approaches will require a small staff (data analysts or technicians) to support implementation and usually result in more features and functionality at a lower cost.

### **Network Security**

Network security and access to critical data and resources is not documented or effectively managed. Staff members indicated that all network services personnel have administrative rights to all network resources throughout the district. Access should depend on the employee's position. Strong security protocols can prevent a security breach for systems and provide the internal controls needed for secured data. The district lacks written board policies or administrative regulations that govern access to specific resources. Unregulated access to sensitive and confidential information contained in various systems, filter logs, and other files creates a significant security risk for the district. Despite that risk, there are no specific policies to address network security or provide for structured monitoring for potential abuse.

### **Payroll Department**

The district's payroll is processed by the Orange County Department of Education payroll system. This is a separate software application and is not integrated with the district's human resources (HR) or financial reporting software systems. All employee data, including pay rates, benefit costs and step-and-column placement are manually entered into both the payroll and HR systems. When payroll data is manually entered into several systems that are not integrated, the margin of error increases with the number of transactions. Audits comparing or reconciling the data in both systems are not performed until after the payroll has been processed for accuracy.

The Payroll Department began to experience a series of major changes in the 2007-08 fiscal year when the payroll supervisor, who had more than 21 years of service with the district, retired. Since then, the district has been unable to fill the position with a knowledgeable and experienced supervisor for any substantial length of time because of a series of issues including medical leave, voluntary departure, employee absenteeism and district layoffs. Because of this instability in the department, the district has experienced missed deadlines, a high number of errors, and continued technical issues involving payroll. To assist with payroll workflow and meet numerous payroll deadlines, a number of part-time substitutes were hired by management to assist the Payroll Department. In September, the district hired a payroll lead that has payroll experience but no specific school district experience. The district will need to provide immediate intervention for experienced personnel and professional development training to address the needs of the Payroll Department. The district should also implement a cross-training program to minimize the loss of institutional memory if additional employees depart. This type of cross-training program will enhance operations and provide the experience necessary for the district to operate more efficiently.

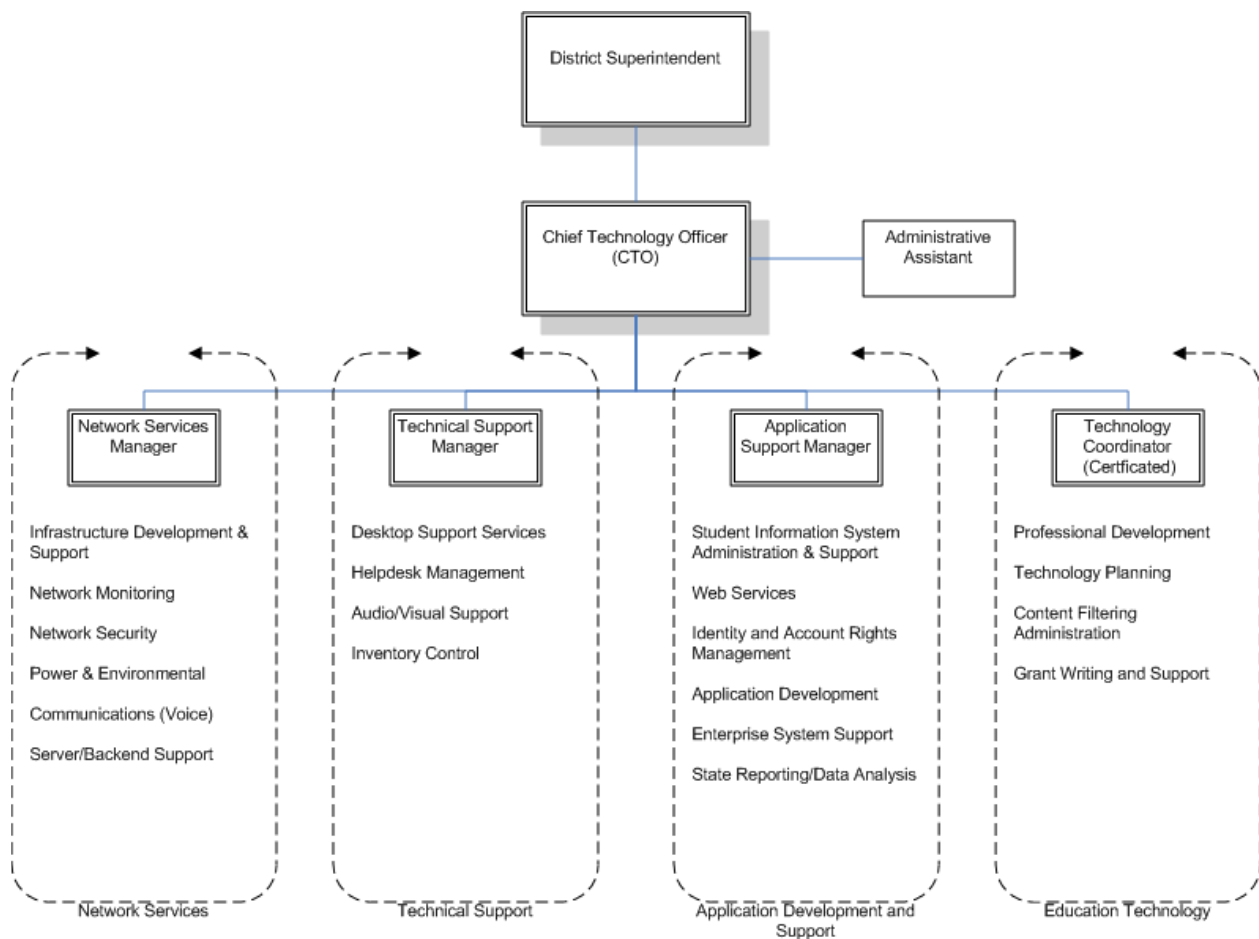


# Findings and Recommendations

## Technology Department

### Organizational Structure

The Technology Department is divided into two groups: Information Services (IS) and Information Technology (IT), and each group is led by a separate director. The IS director reports to the superintendent while the IT director reports to the assistant superintendent of education services. To more effectively collaborate with Education Services, the Instructional Technology Director was assigned to report to the Assistant Superintendent of Educational Services in July 2009. Neither director could articulate a clear understanding of the district’s strategic direction in technology. Both are primarily involved with operational management of current projects.



Despite the structural separation between the IS and IT groups, there is no clearly defined division of roles and responsibilities between the two. Instead, roles and responsibilities appear to be random and overlap. Many employees interviewed complained about a lack of support and guidance in instructional technology. For example, the IT division has no staff assigned to the area of instructional technology. Instead the focus is solely on computer hardware and network administration services.

The current organizational model does not provide the necessary leadership and support. The two directors engage in little strategic planning, and the two groups do not interact routinely. Department staff members indicated that the two groups have not met formally for three years.

One attempt by the two divisions to work together involves sharing a single staff member who functions as a programmer and a network analyst. However, this position alone is not adequate to promote effective collaboration.

### Staffing, Management, Supervision, and Communication Practices

#### Supervision

Because the technology service model is decentralized, the district has a relatively small central office staff to provide leadership and support to site personnel. In order for this type of model to be effective, it would require a high degree of standardization at the site level and adequate support at the district level.

The current structure relies on LAN administrators to provide site-based support. In the industry as a whole, LAN administrators typically have well-defined and highly specialized responsibilities that exceed those of district LAN administrators at Irvine Unified. While the district has made an effort to define the responsibilities and expectations of this position, interviews with the staff indicate that the skill requirements and responsibilities of LAN administrators are not standardized. This affects the quality of service delivery from site to site.

At some sites, the LAN administrator is a certificated teacher receiving a stipend. These teachers have a classroom schedule that makes it difficult for them to respond to problems in a timely manner. At other sites, the LAN administrator is a classified employee on a part-time schedule. Principals report that their program and site support depends completely on the specific individual's skills.

District-defined responsibilities for LAN administrator positions also include taking attendance at monthly meetings and providing at least two in-services training sessions for professional development. However, staff members indicated that monthly meetings are frequently cancelled, and opportunities for training are limited. LAN administrator job descriptions should be well defined and include required skills and knowledge. Each



LAN should be provided with annual continuing education or training. Monthly meetings should be convened to communicate site needs, share the organization's vision, goals and map progress toward goal implementation.

A LAN administrator position should be able to analyze more complex computer- and network-related problems that are reported by site personnel. This position should provide professional-level support to sites and be able to identify, troubleshoot and resolve problems. Examples of key duties include the following:

- Resolving issues with desktop systems
- Identifying, troubleshooting, and resolving hardware and software problems
- Providing technical expertise and support to end users
- Training end users on the use and features of the various operating systems and applications software.
- Providing work direction for student assistants
- Using established system support tracking software to log service requests; monitor and track problem resolution; identifying patterns of failure, researching bug fixes, and implementing solutions; communicating with district Technology Department regarding unresolved problems
- Configuring and installing Windows workstations operating systems
- Installing, certifying, and troubleshooting local/remote campus network cabling infrastructure, including a wide variety of local area network equipment and software
- Maintaining a variety of records and/or documentation related to installation configurations, equipment maintenance and repair history, cabling, time worked, and services provided
- Collaborating with programmers and analysts to solve application problems to meet end-user computing needs

Staff members indicated that there have been no formal meetings of the entire technology team at the district level in years. District staff members have periodic meetings in “job-alike” groups, but report that most communication is handled through e-mail. Most meetings are informal and periodic.

#### Software/Program Development and Implementation

Programming staff members react to needs with little view to the future. The district has adopted a business model of developing critical business systems for financial reporting requirements in-house rather than seeking alternatives that may better meet district needs. While this model can have benefits, it requires a significant investment in highly-skilled programming staff that has a thorough understanding of the business workflow to be successful. It also requires a highly collaborative environment where all affected parties are actively engaged in developing system requirements and their functional implementation.

Decisions that involve new software applications or new program implementation are often made without the involvement or collaboration of the two technology directors. Without their involvement, the district does not effectively evaluate all options and available products that integrate with existing systems.

When implementing new hardware or software products, many questions should be considered including the following:

- Can/should the district develop an in-house product?
- Are there other solutions to meet the needs that are more cost-effective?
- What other products are on the market?
- Does the district have appropriate resources available to support the new application?
- Does the new application meet district standards to integrate properly with existing network configurations?

Ongoing support for new products is assigned to the Technology Department, making short- and long-term planning difficult. The alignment of appropriate budget resources and staffing to support new software applications is frequently inadequate or not considered when making the decision to purchase new software.

#### Communication Practices

An evaluation is necessary to measure the effectiveness of technology services. However, because of ineffective communication, district technology managers form perceptions that are often different than those of end users. One example is the district's report card that is sent to parents. Curriculum leaders and principals described the current report card as inadequate, yet the IS Director described the report card as "fabulous." Another example involves the issue of desktop "reimaging," a process in which a computer hard drive is formatted by overwriting the current operating system, applications and user settings. The IT Director reported that when a problem takes longer than 10 minutes to solve, the machine is reimaged, resolving the issue effectively and efficiently. However, end users indicated the process is used as a last resort because it often results in lost files, applications and user settings.

Declining morale was reflected in comments made by Technology Department employees. Staff members in two separate job-alike groups indicated that technology issues that are brought to the attention of directors remain unresolved. School staff members indicated that the Technology Department does not emphasize customer service and is overly restrictive, especially in the area of Internet content filtering. Although this filtering prohibits access to undesirable Internet sites, it also hampers the ability of users to conduct research and complete appropriate work-related activities. Another example involves the need for some instructors to use Apple Macintosh computers in some classrooms for specific instructional program requirements. Instead of exploring ways to support this need, the sites were simply told that these services are not provided, and the staff will have to seek alternative methods of resolving the issue.

The executive cabinet wants to restructure the Technology Department to better support instructional needs in the classroom. This realignment of resources will require a commitment to the strategic plan that defines the overall vision for technology and establishes a framework that includes a technology master plan to build a coordinated data management team. This reorganization should include a position of chief technology officer that participates in the superintendent's cabinet.

## Delivery of Instructional Technology Services

### Curriculum

The Technology Directors do not provide a clear vision of how to integrate existing technology applications into the curriculum and ultimately into classroom instruction. The directors instead focus on providing PC support, network infrastructure, and student information system support. The assistant superintendent of education services recently assumed supervision of the IS director. This change may ultimately provide an opportunity for the district to advance the use of instructional technology in the classroom.

The district has a cadre of dedicated and capable teachers who have embraced technology, but during a series of interviews, it became clear that many had never met as a focus group. Until these interviews, they had not had the opportunity to share ideas on technology in the curriculum and discuss student learning opportunities through technology use.

Teachers reported that curriculum applications throughout the district are not consistent across grade levels even though the district has provided several types of technology hardware devices. Hardware available throughout the district includes the following:

Computers

LCD projectors

Airliners (wireless slates that interface with Smartboards), and

Response pads (An interactive keypad tool for immediate student feedback)

Some schools have these items in almost every classroom while others have only projectors, resulting in a lack of consistency in student learning throughout the district. Staff members explained that the amount of technology used at various schools reflected the vision of the principal and LAN administrator. There is no district-level written or stated plan for distribution, professional development and sustainability of these technologies.

The introduction of new technology should be part of the technology master plan and include monitoring implementation, making any necessary changes and evaluating the results. The district has made a concerted effort to provide each classroom with an LCD projector. While this effort is laudable, there was no districtwide plan developed before purchase that describe how these projectors would enhance instruction or the criteria that

will be used to evaluate success. Many principals reported that only about 20 percent of teachers integrate these projectors into the curriculum for student learning. They also indicated that there was no formal training for certificated staff members or instructional aides on how to use the equipment or incorporate the equipment with lesson plans. The use of technology in the classrooms remains optional. The district should integrate into the technology master plan a clear direction and a professional development program to give teachers the opportunity to use the technology available in their curriculum plans.

Another example of sporadic and inconsistent use of technology involves United Streaming (US). US consists of a large online multimedia library of educational videos, video clips and other images. The multimedia libraries are correlated to the state standards in accordance with subject type, grade level and curriculum standards. Interviews with both principals and other administrators indicated that only a few teachers received adequate training in the use of this tool, especially as it relates to aligning the program with districtwide curriculum standards. As a result, few teachers use the product effectively. This further demonstrates the need for adequate planning and training when the district decides to implement new hardware or software products.

Standards-based, grade-appropriate software should be selected that addresses the direct academic needs of students and is consistent across grades levels. Reports should be run regularly by teachers to ensure that students are making adequate academic gains. The labs should be used for differentiated instruction. The labs can also be used to provide students with the opportunity to utilize productivity tools such as word processing or PowerPoint presentations. The tools should be used for direct curriculum integration based on the International Society for Technology in Education and National Educational Technology Standards (ISTE NETS) models. Additional information can be found at <http://www.iste.org>.

In the district's documentation for the 21<sup>st</sup> Century Learning Skills grant, the use of technology is mentioned at least five times. One key component of the grant is professional development training. The Technology Department should offer training in the use of technology in accordance with the grant requirements and develop a fully documented plan to mandate technology use in the classroom.

The district should develop a strategy to ensure the use of technology in the classroom curriculum. Principals and teachers should collaborate on how to utilize various technology tools in the classroom to achieve goals and meet state standards. One of the challenges the district continues to face is finding a balance between a centralized and decentralized approach that encompasses a districtwide vision and meets site needs. Site leaders and teachers prefer local control, but also need some district direction. Without a coordinated effort between the Technology Department and schools, future efforts to integrate technology into the classroom curriculum will continue be unrealized.

### Assessment Software and Data Warehouse System

One of the significant challenges faced by the district is that while it has developed Irvine On Line Assessment for local benchmark assessments for students in grades three through eight, the data is difficult to understand and does not integrate well with the district's data warehouse, PLATO DMA. This makes it difficult for teachers and principals to review in a timely manner annual reports that would enable them to make necessary changes in instructional strategy. The district is also using Longitudinal Assessment Reporting System to report results from Standardized Testing and Reporting (STAR) and the California High School Exit Examination (CAHSEE). The district has been frustrated in integrating and utilizing these disparate data tools.

### Steering Committee

As part of the district technology master plan, the Technology Department should consider restructuring and expanding its Technology Advisory Committee to help select technology applications that meet the grade-level curriculum standards. One resource to identify state-approved technology learning resources is <http://www.clnr.org>.

### Professional Development

The district has established a training site at a closed school to provide a professional technology development program. During its first year, the site was used to provide several training opportunities for teachers and classified staff, primarily for Aeries attendance and Gradebook. However, staff members indicated that over the last couple of years, the site has been virtually unused.

Teachers indicated there is a great need for training in the use of US, LCD projectors, the Plato Assessment System, airliners, response pads and other software applications. Learning how to integrate these technologies into the curriculum with instructional strategies should be part of that training. While local sites may be used in this effort, the district should sponsor professional development training sessions to ensure that there is a consistent level of professional development districtwide. The district should consistently implement its "train-the-trainer" program for site-administered training events conducted by LAN administrators. A train-the-trainer program uses an existing staff member(s) with technology expertise and teaches this person to train other staff members in the use of technology.

### Network Infrastructure Support

The district has invested in a robust network infrastructure and a team of experienced programmers and Web developers. These individuals can be utilized to build and support a collaborative Web environment for teachers. Web 2.0 technologies, such as wikis and blogs, could provide a platform for teachers to share information, collaborate on best practices, and provide sample standards-based lessons that would support and sustain professional development throughout the district.

The technology support group recently installed a new Web content filter. As previously stated, site and district office staff members described the filter as extremely restrictive for both staff and students. Although limiting Internet usage to appropriate content is desirable, the Technology Department has only moderate variations in profile levels for students, teachers, clerical staff and administrators. Several instructional staff members expressed concerns regarding profiles developed for content filtering and the lack of collaboration, communication or testing of these profiles prior to implementation. Many are frustrated at their inability to have these profiles changed. The Technology Department has no clear procedures for modifying content profiles or accommodating requests to override the filter for legitimate purposes.

### **Delivery of Administrative Technology Services**

The district supports nearly 7,000 desktop computers. Four full-time PC support staff work with part-time LAN administrators at each site to provide technical support throughout the 32 sites in the district. There is no structured work order management system to report, track, and review the work performed. LAN administrators and district support staff members have resorted to developing individual systems for managing their work. One staff member developed a form for a site, another uses Excel, while others simply use e-mail. It is unclear whether any of this documentation is reviewed by management for workload and trend analysis. Without a structured system, it is impossible to prioritize, document, and validate the work completed. The district should implement a work-order management system.

The Technology Department lacks a structured process for managing the implementation of new projects.

One example is a project involving the districtwide implementation of Blackboard. Blackboard is a Web-based course management system that allows teachers and students the ability to participate in online materials and activities in addition to face-to-face learning environments. Students have access to course materials and other educational resources online. Staff and management personnel from both IT and IS indicated there was confusion about the responsibility of each group in the implementation process. Because neither group claimed ownership, it was impossible to determine whether project implementation was timely, conformed to the budget, and was staffed appropriately. A complex project such as this with so many implications for all levels of the organization should be managed and communicated in a structured and methodical manner.

Given the district's highly decentralized model, it is imperative for complex projects to be managed using industry standard approaches. This involves a plan for management and implementation, communications, progress reporting, change management protocols, and clear budget and time-line implications.



### Security

Physical security and access to the computer room servers and other data systems should be restricted to authorized personnel. During fieldwork, FCMAT team members were able to access this area undetected. According to staff members, all personnel in the Technology Department have equal access to the computer room. The district has no list of authorized personnel and no board policy that covers this sensitive area. The district should evaluate security and limit access.

Staff members reported that all personnel in Network Services have administrative access, or rights, to districtwide network resources. The potential for improper use of information contained in various systems, filter logs and databases should be of great concern. The district should establish written board policies and administrative regulations that specifically address network security, access control and monitoring for potential abuse.

### CALPADS

The district has successfully participated in electronic state reporting with California School Information Services (CSIS) for eight years. The process followed includes collection of information from the sites, and IS corrects any errors. A single programmer analyst has primary responsibility for all activities related to state reporting, including requirements analysis, training, development of support materials, data submissions, data corrections, reports verification and report certification.

With the implementation of the California Longitudinal Pupil Achievement Data System (CALPADS) in the current fiscal year, the related activities involve much more extensive detail-level reporting requirements. The need for coordinated data management, integrated information systems and distributed responsibilities also becomes more critical in a district the size of Irvine Unified. The new CALPADS data reporting requirements are more extensive and require even more detail about the staff and highly qualified teaching competencies; course and course-related information; as well as discipline and truancy reporting.

Although IS has made efforts to identify the new requirements and inform the district and site staffs, it is unclear that the program staff thoroughly understands requirements, data population and time lines for reporting. Sites are provided with monthly reports of data errors to be corrected, but there is no accountability for ensuring these mistakes are ultimately corrected and not replicated.

### **Data Governance Practices**

Unlike many other schools districts, the district has not had to rely on data analysis to identify student performance deficiencies. The decentralized model for technology has met the district's needs until recently.

Data management and data governance have not been the focus of the district or the Technology Department. As a result, data use and quality were not a high priority.

The district finds itself with disparate and antiquated operating systems that cannot provide the detailed and extensive information needed to meet state and federal reporting requirements. The district should address data use and quality.

The district has several systems to support its Financial and Human Resource departments. These systems are not fully integrated and require duplicate data entry and manual reconciliation. There are gaps in functionality, such as position control, that need to serve more than one purpose or department.

The district also uses several systems with student information, including Aeries, Plato-DMA and the special education information system (SEIS), but has not identified the system of record for data elements where redundant data is stored. A system of record is where data is initially entered and maintained and is considered the authoritative source of that data. Examples include staff demographics in the HR system, or special education services in SEIS. Although the goal is complete systems integration, the district has not established a short- or long-term plan to fully integrate these operating systems. An evaluation is underway to purchase an application to integrate Aeries and SEIS.

The district uses the initial cost of a system as the primary basis for purchase. Software decisions are made independently and with minimal regard for life-cycle costs, identifying all requirements, or even how the system would actually be used. New systems are not fully vetted, and requirements are not evaluated before purchase to ensure that systems will operate on the existing infrastructure. Additionally, resources for training, implementation and maintenance, and operations are not identified in advance to ensure the new applications can be absorbed with the existing workload and incorporated into the budget. The district lacks consistent consideration for how the applications can or will be integrated with the existing operational systems. In-house software development projects are managed by the senior programmer, but there are no project tracking, written requirements, scope of work, or approval procedures to determine that requirements are being met and that the project stays within budget.

The district developed an automated enrollment system for parents to enroll students using a Web application. However, parents sometimes do not understand the question regarding whether the student previously attended a school in the district. This deficiency has resulted in duplicate student identifiers that have been replicated in several systems, creating data quality and integrity issues.

#### Data Governance Process

Many issues identified in this report can be addressed with a data governance process. This process entails involving all affected parties in making shared decisions on district data. The district should identify the organization's data assets, and the personnel or orga-



nizational units that have primary responsibility for the use, accuracy, and maintenance of the data. These parties should understand how data and technology can be used to support district goals, operational and academic needs, and data needed to support user constituents.

These personnel in conjunction with site and technical staff, would form a Data Management Team (DMT) and have shared responsibility for the overall data needs of the organization, including establishing data standards and procedures, specifying systems of record for data elements, setting audit procedures, and protecting the security and confidentiality of all data. This team approach will foster a collaborative organizational approach regarding data and data systems and will preclude schools and departments from isolated decision-making, which should reduce subsequent implementation and operational problems.

## Recommendations

*The district should:*

1. Reorganize the structure of Technology Services and eliminate one director position to create a Chief Technology Officer (CTO) position. This cabinet-level position should be directly involved in developing and implementing the vision for district technology. The district should also reorganize the structure of Technology Services so that there are clear functional areas.
2. Modify the technology master plan and ensure regular meeting schedules for job-alike groups, district technology staff and extended staff at schools.
3. Involve technology management in interdepartmental meetings and communications to ensure coordination of services, adequate needs assessment and evaluation of services against identified needs.
4. Establish a structured feedback process for services and staff, to include end-user input and regular staff evaluation and professional development plans.
5. Implement an organizational structure that provides for input from teachers when new technology is implemented. This can be accomplished through use of a ticketing system to track progress along with the staff development offered and attended along with observable use of the technology in the classroom by the staff and students.
6. Create a standing district technology steering committee made up of teachers and district administrators to vet and approve selected technology applications and devices that meet the grade-level curriculum standards. A great resource for identification of state-approved and aligned instructional technology resources is <http://www.clrn.org>.

7. Work with the existing Technology Advisory committee to develop a survey of teacher professional development needs regarding technology skills. The district should develop a series of technology professional development offerings based on survey results. These training opportunities should be offered at the district center and where appropriate at school labs. Technology teachers should provide these training sessions.
8. Consider tying a component of principal goal-setting to the effective use of technology at their sites.
9. Use the technology training center to offer a variety of training sessions that may be offered after school, evenings, holidays and summer breaks.
10. Explore and adopt other alternative online training opportunities where teachers and staff can access these materials for ongoing support with anywhere, anytime access.
11. Revisit the LAN administration program to review the duties and determine whether this is the best model for meeting school needs.
12. Revisit the efficacy of maintaining a programming staff to internally develop and support custom enterprise applications for payroll and human resources. A review of systems offered by the county office along with commercial “off-the-shelf” products should be performed to evaluate the cost/benefit of each approach.
13. Expand use of the district’s Intranet Web site for teachers to collaborate and post best practices in technology integration. These can be instructional strategies, sample lessons, Web resources, wikis and blogs for ongoing collaboration.
14. Implement a structured work-order (ticket) management system to provide visibility and accountability to the work being performed across all areas of the department and the ability to track trends and forecast needs.
15. Develop and implement policies and procedures related to network security and access control and ensure they are monitored.
16. Adopt a more structured approach to project management in the department to include adequate evaluation of requirements, development of scope, planning, tracking, and reporting of projects.
17. Conduct a comprehensive review with district and site administrative staff, program staff and IS on the requirements for CALPADS reporting, identify any gaps between what is currently collected and what will be required under CALPADS, and make plans for bridging the gap.
18. Cross-train IS staff on the CALPADS reporting requirements, data population and system use.
19. Review requirements and data standards with site data-entry staff.

20. Identify the data reports that sites are responsible for reviewing to verify the data and determine accuracy. The district should establish an approval procedure to document completion of verification
21. Re-evaluate how IOLA, LARS and PLATO-DMA can better integrate to serve as a tool for review of student achievement on local, district and state benchmark assessments. If this integration is not possible, then the district should re-examine these tools to better serve data needs. The district may also want to consider the need to provide increased professional development in the use of these systems and tools.
22. Establish a data management team, which should include district office program managers, representative site staff including administrators and clerical staff, and technical staff.
23. Identify systems of record and how systems are integrated to avoid redundant data entry and systems maintenance.
24. Establish documented procedures and consistent data standards to ensure data for state and federal reporting are accurate, complete and consistent.
25. Develop clear protocols to ensure network security. The district should ensure confidentiality of data. This should include identifying the appropriate personnel who can take necessary action, and identifying the circumstances under which action can be taken using defined methods
26. Use the data management team to evaluate all new requests for software purchases and development to ensure requirements are well documented and life-cycle costs are included. The district should determine how the new request will integrate with existing systems and what additional resources may be needed for support once implemented.
27. Modify the automated enrollment process to include all previous school enrollments. This should reduce the duplicate local identifiers and also assist with selecting statewide student identifiers.
28. Consider adopting project management methods, including development of a project plan and project schedule at the outset, a standard process for reporting progress and risk identification, and a project closeout report at the conclusion. The plan show do the following:
  - The project plan should document the scope of the project and the roles and responsibilities of those involved, as well as the criteria used to evaluate the success of the project.
  - The schedule should document the specific tasks that need to be completed as well as the time and resources required to complete them.
  - The standard process for reporting progress should formalize the method of reporting progress improving the clarity of project status information.

- Risks should be identified at the outset of each major project and should be identified by the affected parties, including IS and program staff.
- The project closeout report should review determine requirements were met and possible improvements. The use of project management methods helps with establishing expectations before projects begin by identifying project scope, target dates for completion and constraints. Status reporting as the project progresses facilitates communication between district and site users and the IT Department.

## Payroll Department Structure

### Payroll Organizational Structure, Staffing, Workload/Workflow and Compliance

The district payroll for all certificated, classified and management employees is processed through the Orange County Department of Education payroll system, which is a separate application software that is not integrated with the district's human resources or financial reporting software systems. All employee data, including pay rates, are manually entered into several systems, including the payroll and HR systems. When payroll data is manually entered into multiple systems that are not integrated, the margin of error increases with the number of transactions.

Payroll audits comparing and reconciling the employee data in both systems are not performed until after the payroll has been processed for accuracy. This process has required the payroll staff to make several payroll corrections in each payroll reporting period once errors are identified. Also involved is the accounts payable staff, which has prepared more than 200 revolving cash checks for payroll issues to date in 2009-10. These are tracked and reimbursed through the payroll system.

The Payroll Department experienced a series of major changes beginning in the 2007-08 fiscal year because of the departure of the payroll supervisor, who had more than 21 years of service with the district. Since then, the district has been unable to fill the position for any substantial length of time because of several issues including medical leave, voluntary departure, employee absenteeism and budget reductions. Because of this instability in the department, technical issues involving payroll have continued, and error rates have increased. A number of part-time substitutes were hired by management to help with Payroll Department workflow and meet numerous payroll deadlines.

The department is composed of one lead payroll technician, three payroll technicians. One of the technicians went long-term medical leave, and three part-time substitutes have provided assistance to the department during her absence. As of the completion of this report, this technician is no longer employed and was replaced. The staff reports to the assistant director, fiscal services. The four technicians and substitutes process an average of 1,800 certificated and 925 classified payroll warrants each month.

The former supervisor was responsible for day-to-day operations, including high-level technical processes and decisions. All new-hire documents, employee change of status, and variance reports from the district's in-house Aeries HR system were reviewed and corrected by this employee. Staff members from Payroll, Human Resources, and Fiscal Services indicated that this employee maintained strict control of the Payroll Department, but did not help train others to perform key tasks. Most perceived that the department functioned efficiently and with a high degree of accuracy.

With the loss of this payroll supervisor two years ago, the department experienced a loss of institutional memory and technical payroll knowledge. All complex payroll calculations were shifted to less experienced payroll technicians. Important decision making, relationships and communications with Human Resources, Business and Fiscal Services and schools became difficult and strained. Staff members indicated that there is a long history of tension, communication and mistrust between the Payroll and Human Resources departments, and these issues continue to exist.

In March 2008, the district hired a part-time payroll supervisor who had a school business and finance background, but no experience with school payroll experience. This supervisor had difficulty learning the basic school payroll processes and payroll system, including Aeries system and the related reports. The district provided training through the county office's Payroll Resource and Training Unit, but the employee still lacked the fundamental knowledge necessary supervise the department and oversee the payroll technicians.

Nine months later, in December 2008, a Payroll Department senior payroll technician who worked 25 years with the district retired. In May 2009, a senior payroll technician with extensive experience was placed on long-term medical leave. In the interim, the department operated with a payroll supervisor and two payroll technicians with limited experience. To help with the workflow and meet the numerous payroll deadlines, part-time substitutes were hired. In August 2009, the payroll supervisor position was eliminated because of budget reductions.

In September 2009, the district hired a lead payroll technician to replace the payroll supervisor position. This employee has private sector payroll, tax accounting and supervisory experience, but no school payroll experience. This employee is committed to learning school payroll; however, she is currently being trained by the two payroll technicians.

All employee demographic data and pay information is manually entered into the Aeries HR and the county office payroll system. This has prompted numerous errors, including overpayments and underpayments to district employees. Payroll audits are not performed on the data by the Human Resources or Fiscal Service departments until *after* the payroll has been processed and the detailed payroll data file is received from county office. The assistant director of human resources runs a variance report each month after the payroll posts to compare information from the Aeries HR system with payroll data. This report compares fields from each database and provides variances on selected data.

The employee new-hire documents and the electronic change of status, which authorize stipends and salary changes, are initiated at the sites. These forms are electronically submitted to HR for initial review before being sent to Fiscal Services for budget. The HR deadlines for these documents are the tenth of the month for certificated staff and the twentieth for classified staff, however, the deadlines from HR to payroll are unclear. The

district should review the time line for processing and ensure that the Payroll Department has adequate time to process payroll to the county office timely.

When documents are released to payroll, the technicians audit them for accuracy and verify the information in the Aeries HR system. The payroll technicians stated that the salary pay rate, range and step placement often do not match the HR database. These discrepancies cause additional time to be spent on researching and correcting the mismatched data. Once the information is corrected, the payroll technicians make the necessary changes to employee's payroll record. Payroll deadlines are often missed, and employees are paid incorrectly or paid from invalid budget accounts. In several instances, terminated employees continued to be paid, sometimes for several pay periods, because of the delay in entering information into the system.

The HR and Payroll departments lack defined standardized operating processes and procedures. There is considerable strain between the two departments concerning communication and time lines. Many of these issues could be resolved if the two operating systems were integrated, and there were defined time lines for processing information from HR to payroll. The district is experiencing a high error rate with payroll and valuable processing time is lost through duplication of efforts.

Employee time cards are submitted to the Payroll Department at various times of the month. Time cards often do not have budget codes before their arrival in the Payroll Department. As a result, the payroll technicians spend valuable processing time tracking down the appropriate budget codes.

The district substitute calling system (SEMS) is not utilized to create an electronic time card or to produce an employee absence report. Elementary substitute teachers instead manually carry a time card from school to school, and high school substitute teachers carry a separate card for each high school. The district should determine how to utilize SEMS to provide electronic processing.

The department lacks effective communication with schools and other departments regarding payroll deadlines, or due dates for time card processing through payroll. This often results in time cards being submitted late and missing the final payroll run. In addition, the payroll staff often processes on the final audit day, which should be reserved for verification and final audit processes. The practice results in additional errors.

Missed time cards are often paid through the accounts payable revolving fund because the employee expects timely payment. Requests for payroll revolving checks have increased in the past two years. A test sample taken on the Oct. 10, 2009 payroll revealed that approximately two dozen revolving cash checks were issued. Staff members indicated that this number was greatly exceeded in several payroll cycles.



Staff members in Payroll, Fiscal Services and HR indicated that operating without an experienced payroll supervisor has been difficult. The department has lacked leadership and experienced high turnover in staffing. Furthermore, the department was not properly represented when the district made the decision to upgrade the Aeries HR system. As a result, the system design does not include the most critical element of integration with existing systems in the business office including payroll and position control. The district should re-evaluate this decision and explore alternative options.

One option is a new Web-based financial system from the county office. Still in testing, this system is expected to be released within the next year and is a fully integrated budget, payroll and financial system. The district should meet with county staff to determine if this new platform meets district needs and plan for the transition once an implementation plan has been fully vetted.

## Recommendations

*The district should:*

1. Ensure that school district payroll training is offered to all employees in the Payroll Department. This training should include how each payroll screen operates, how to interpret daily payroll edit reports, how to create custom searches and how reports can be utilized before and after the final payroll is processed.
2. Encourage the staff to attend California Association of School Business Officials (CASBO) workshops or purchase the workshop training guide, “Payroll Concepts and Payroll Reporting & Compliance for California Schools.”
3. Continue to obtain comprehensive school payroll assistance and training from the county office or an independent contractor on a one-on-one basis.
4. Require the payroll staff to attend the county office’s Payroll Advisory Group meetings to be informed of new payroll system updates and have an opportunity to network and discuss various payroll and HR situations with other Orange County school payroll professionals.
5. Require the HR staff to attend the county office’s Payroll Advisory Group meeting. This would encourage a partnership and a sharing of knowledge.
6. Encourage the lead payroll technician to join and actively participate in the CASBO Payroll Research and Development Committee. This is a smaller group of payroll professionals from surrounding counties who network to provide additional support.
7. Consider holding weekly meetings with key personnel from Payroll, HR, and Fiscal Services to discuss current issues that affect employee status or other important departmental projects or deadlines.



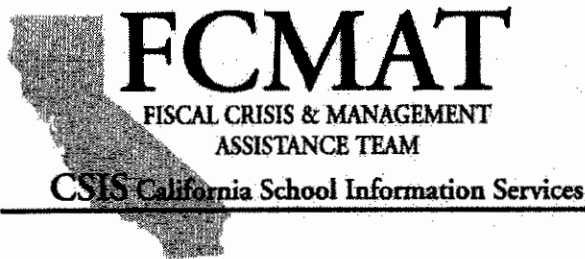
8. Consider reviewing and implementing an intergraded school financial/human resources management system that will be compatible with the county office payroll system.
9. Consider eliminating the electronic Personnel Requisition Approval and Recommendation for Employment form from the “payroll bucket.” These documents are not necessary for payroll; however, they would continue to flow to HR and Fiscal Services.
10. Consider including the budget code on the electronic Employment Summary form. This document, along with the employee’s W-4, DE-4, retirement forms, direct deposit, and other voluntary deduction forms should continue to be submitted to Payroll.
11. Consider assigning the HR department to audit and review all pay-line entries that were manually entered or changed in the payroll system. Using the county office’s payroll applications, reports can be run the day after the pay rate entry has been made in the payroll system. This would help ensure that the payroll pay rate, including FTE, and budget codes, are correct and match the Aeries HR system before the final payroll run.
12. Review internal payroll deadlines. There should be two separate deadlines, one for when payroll documents from school or work sites are due to the Payroll Department (e.g., time cards/sheets and employee absence slips) and another for when documents are due from HR to Payroll (e.g., new-hire paperwork and electronic change of status). The time cards/sheets and employee absence slip due date should be at least five days before the county office payroll deadline, and HR’s deadline should be at least three days before that deadline. This would give ample time for the payroll staff to meet all county office payroll deadlines and also allow for last-minute documents.
13. Assign the Payroll, HR, and Fiscal Services departments to collaborate to develop a desk manual that includes step-by-step procedures, sample documents, recovery and correction processes for immediate reference and training.
14. Develop a payroll document due-date check list for time cards and employee absence slips. This will help ensure that payroll deadlines are met, employees are paid in a timely manner, and administrators are held accountable for any missing deadlines.
15. Consider utilizing a payroll list/group e-mail that includes school timekeepers, office managers, and administrators so that important information and reminders can be sent quickly. For example, deadline reminders can be sent for time cards, employee absence slips and the electronic change of status when important fiscal and calendar year-end information is due.

16. Consider creating a payroll Web page so employees can easily access the most common payroll forms. The district should post both Payroll and HR deadlines for employee time cards/sheets, list district pay days, and provide links to federal, state, CalSTRS/CalPERS retirement systems; credit union(s) and all employee bargaining groups. Information, instructions, and a link to county office's online pay stub and W-2 Employee Information System (EIS) system should also be included.
17. Consider implementing a reorganization that would include a classified management-level payroll administrator and a payroll department clerk with the following duties:
  - The classified management-level payroll administrator would coordinate all activities in the Payroll Department, provide leadership, direction and training to support staff; and serve as a liaison with other departments and agencies. This position should have progressively responsible school payroll management experience, including school payroll supervisory experience.
  - The Payroll Department clerk would provide additional support to the payroll administrator, lead payroll technician and payroll technicians. Sample of duties would be to organize, review and verify for accuracy and completeness the employee time cards/sheets and absence slips; maintain and process employee voluntary deductions; keep up employee payroll files; compile various documents for subpoena of records; audit and prepare payroll vendor billing and sort employee paychecks.

# Appendix

## A *Study Agreement*





**FISCAL CRISIS & MANAGEMENT ASSISTANCE TEAM  
STUDY AGREEMENT  
September 9, 2009**

The FISCAL CRISIS AND MANAGEMENT ASSISTANCE TEAM (FCMAT), hereinafter referred to as the Team, and the Irvine 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 District. 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**

1. Review the district's payroll department with respect to organizational structure, staffing, workload/workflow and compliance issues and make recommendations for improvement.
2. Review the district organizational structure for technology services support delivery and make recommendations for improvement.
3. Review the district's staffing for technology services support delivery and make recommendations for improvement.
4. Review the district's delivery of instructional technology services and make recommendations for improvement.
5. Review the district's delivery of administrative technology services and make recommendations for improvement.
6. Review the district's data governance practices and make recommendations for improvement regarding state requirements, best practices, innovative ideas, and projected needs.

**B. Services and Products to be Provided**

- 1) Orientation Meeting - The Team will conduct an orientation session at the District office to brief 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) 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 - 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 administration 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 cost. Status of the recommendations will be documented to the District in a FCMAT Management Letter.

**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. Debi Deal, FCMAT Fiscal Intervention Specialist
- B. Paula Bolz, FCMAT Fiscal Consultant
- C. Andy Prestage, FCMAT Management Analyst
- D. Steve Carr, FCMAT Technology Consultant
- E. Scott Sexsmith, FCMAT Technology Consultant
- F. Nancy Sullivan, FCMAT CSIS Deputy Chief Operations Officer
- G. Mary Barlow, FCMAT Deputy Administrative Officer

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

#### 4. **PROJECT COSTS**

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

- A. \$500.00 per day for each Team Member while on site, conducting fieldwork and analysis at other locations, preparing and presenting reports, or participating in meetings.
- B. All out-of-pocket expenses, including travel, meals, lodging, etc. Based on the scope of work identified in section 2 A, *estimated* total cost is \$27,500. 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 years' 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 COE or District pupils. The COE and District shall take appropriate steps to comply with EC 45125.1(c).

