FCMAT

**FISCAL CRISIS & MANAGEMENT
ASSISTANCE TEAM**

River Delta Unified School District

Technology Services Review

May 4, 2009

Joel D. Montero
Chief Executive Officer

May 4, 2009

Richard Hennes, Superintendent
River Delta Unified School District
445 Montezuma
Rio Vista, California 94571-1651

Dear Superintendent Hennes:

In September 2008, the Fiscal Crisis and Management Assistance Team (FCMAT) entered into an agreement for a fiscal services review with the River Delta Unified School District. The request specified that FCMAT would:

1. Review the organizational structure and staffing for technology services delivery and make recommendations for improvement.
2. Conduct a review of the district's administrative technology and make recommendations for improvement.
3. Conduct a review of the district's instructional technology and make recommendations for improvement.

FCMAT visited the district to conduct fieldwork, interview staff, and review documents. This report is the result of that effort.

We appreciate the opportunity to serve you, and please give our regards to all the employees of the River Delta Unified School District.

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.

Study Agreements by Fiscal Year
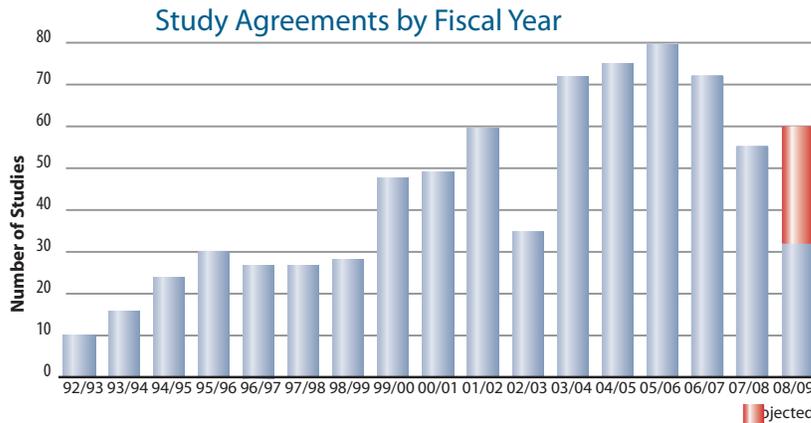
Total Number of Studies 743
Total Number of Districts in CA 982

● 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

The River Delta Unified School District extends into three counties: Sacramento, Solano and Yolo. Responsibility for the district's oversight is maintained by the Sacramento County Office of Education, and it is governed by a seven-member board of trustees. The district serves several communities along the Sacramento River and has an enrollment of approximately 2,058.

In October 2008, the district requested that the Fiscal Crisis and Management Assistance Team (FCMAT) review its Technology Systems Department. The scope and objectives of this review are as follows:

1. Review the organizational structure and staffing for technology services delivery and make recommendations for improvement.

2. Conduct a review of the district's administrative technology and make recommendations for improvement.

3. Conduct a review of the district's instructional technology and make recommendations for improvement.

Study Team

The FCMAT study team was composed of the following members:

Greg Lindner*
Director of Technology Services
Elk Grove Unified School District
Elk Grove, California

Andrew Prestage
Management Analyst
Fiscal Crisis and Management
 Assistance Team
Bakersfield, California

Kelly J. Calhoun Ed.D.*
Director of Information and Technology
 Services
Folsom Cordova Unified School District
Folsom, California

Laura Haywood
Public Information Specialist
Fiscal Crisis and Management
 Assistance Team
Bakersfield, California

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

Study Guidelines

FCMAT visited the district in October 2008 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. Organizational Structure and Staffing

III. Administrative Technology

IV. Instructional Technology

Executive Summary

The River Delta Unified School District's technology services are almost entirely decentralized, with each school providing its own variation of PC support, Web services, instructional applications, and even some infrastructure development. This has led to poor or nonexistent services in some aspects of technology, and inefficient use of funding. Recently the district assigned responsibility for technology services to the chief of educational services. The education services division has been working to develop policies, reconstitute a district technology committee, create a technology support structure, and generally organize technology services delivery. Progress has been made, but has been slow because of lack of technical expertise in the department and other responsibilities assigned to the education services office. The district should consider hiring a technology director who is highly skilled in both desktop and network support, and can lead the district in selecting and implementing the best technology hardware and applications for its needs.

The district contracts with three companies for technology support and may be overpaying for some services. A staff technician could handle the desktop support work, and, if funding is available, additional staff members could be hired to reduce the reliance on vendor support.

The district's network infrastructure appears to have been built piecemeal over many years. The district recently has worked to centralize server activity to the district office, however there is still much to be accomplished. A comprehensive, professional, and reliable infrastructure plan needs to be developed to standardize access and technology services for all sites. The district contracts with a vendor for network support and maintenance functions. Clear guidelines are needed to delineate which aspects of infrastructure support are provided by a vendor, technology staff member, or site staff.

The district has developed standards for hardware and software. In addition, the district has acceptable use policies governing employee use of technology resources however some security policies are lacking particularly with regard to student and staff log-ons. The Lightspeed Internet filter is not being managed by a properly trained employee. A district technology management position should be assigned to oversee these types of duties and responsibilities.

Insufficient bandwidth keeps the district's Voice over IP system from functioning properly.

The availability of instructional technology is inconsistent from site to site. A comprehensive, districtwide instructional technology use plan should be developed by key stakeholders. It is particularly important to engage school site administrators in the planning to reflect their curricular priorities and their students' needs. District efforts to standardize applications used at the elementary school level have resulted in all elementary sites

using Accelerated Math, Accelerated Reader, Lexia Primary Reading, English in a Flash, and Math in a Flash. Efforts to identify and standardize other technology applications used at the middle and high school are planned.

The current networking infrastructure issues will need to be resolved before some technology applications can be implemented. In the meantime, many highly rated instructional applications today are available in Web-based versions. Existing technology support materials that come with the district's textbooks could be a valuable resource.

The district's technology committee should be assigned to assess the technology hardware and software resources currently available for instructional use at every school site. The committee should participate in processes designed to assist the schools with determining which of their curricular priorities might benefit from the use of instructional technologies. According to the district's staff, the Governing Board recently approved the Enhancing Education Through Technology (EETT) plan. The district should review the new plan in light of the recommendations contained in this report.

Professional development for teachers is essential to the effective use of instructional technology, and is a major challenge for most districts. The California Technology Assistance Project (CTAP) is designed to assist smaller districts with this type of professional development.

If funding is not available for a certificated educational technology specialist, much benefit could be derived from having one or two site technology liaisons at each school.

Organizational Structure and Staffing

The district has budgeted approximately $150,000 for districtwide technology expenses in the 2008-09 fiscal year. Though some of these expenditures were for one-time improvements, FCMAT believes that the amount represents an opportunity for the district to develop a comprehensive technology environment with appropriate staffing. District data shows that $38,000 of this funding goes to partially fund two classified staff to manage the student information system and e-mail. In addition to this funding, however, school sites also use their own budgets to have vendors repair hardware and fix technology issues. The FCMAT study team believes that a budget analysis would show considerably more funding being spent on technology throughout the district than the amounts budgeted.

The district contracts with the following three companies to handle its technology needs:

- Mac PC 911 for hardware, software and technical support at a rate of $85 per hour.
- Decotech Systems for networking and wide area network support.
- Stepford, which is implementing a Citrix (thin client) pilot project.

The following table provides information regarding expenditures to vendors during fiscal year 2007-08 associated with the vendors listed above.

Vendor	2007-08 Expense
MacPC911	20,787.51
Decotech Systems	44,611.04
Stepford	35,346.79
Total Expenditures	$100,745.34

Payment to vendors has been as much as $170 per hour. Hourly rates have recently been reduced by negotiating for group hours to receive quantity discounts from vendors. Grouped rates range from $135 to $155 per hour depending on the level of service required. Contracts for support vendors need to be reviewed at least annually.

A Citrix pilot project is in place at three of the district's schools. The purpose of the project is to evaluate the support, functionality, and cost of using thin client technology in a computer lab environment. A thin client environment is one where many small, affordable computer terminals are connected to a single server that hosts software services such as Internet and office applications. Use of a server for multiple thin client terminals to provide access to common applications is less expensive than equipping a lab with multiple desktop computers. The number of associated support requirements is lessened because only one computer (the server) must be maintained. Site administrators indicated that the labs are operating and will be evaluated for future use in two to three years. Before the implementation of the thin client labs, the vendor and district administrators met with site principals to identify uses for the computer labs. Based on those discussions, all labs were to be equipped with the Microsoft office suite of applications and curriculum program. Site administrators understood that this was a pilot project, but some expressed frustration that the project's educational were not well defined. Efforts to implement required features have often resulted in notification from the pilot project vendor that additional expenditures will be incurred.

The district lacks consistent technology support. Although the district has met its goal of placing computer labs at every school site and has identified a staff member to provide support, not every site support person has the same level of support proficiency. This has resulted in inequitable instructional opportunities for the district's students, a problem that is likely to persist until the district develops a comprehensive, districtwide instructional technology support plan.

Recommendations

The district should:

1. Hire a technology director, with experience similar to what has been developed through the California Educational Technology Professionals Association CTO Mentor Program. Seek candidates with superior skills in all facets of desktop support, local and wide-area networks, who can both lead and perform the hands-on work. Additional information about the CTO Mentor Program can be obtained online at http://cetpa-k12.org/cto/.

2. Hire a technology technician to handle desktop support work. If funds allow, consider hiring two employees to further support the district's computer investments and reduce the costs of outside vendor services.

3. Schedule a thorough analysis and review of the Citrix project for January, 2010, and communicate the results to all participants of the pilot. From this analysis, determine whether the pilot should continue or be modified. Principals should understand that the program is still new and that the third lab was only recently brought online.

Administrative Technology

The district covers a large, remote geographic area including parts of Sacramento, Solano and Yolo counties. Its schools report considerably different levels of speed, bandwidth and reliability of network and Internet access. These problems stem from a networking plan that appears to have developed in pieces over several years. Without a unified, comprehensive and achievable design for its wide-area network, the district has spent time and money on stopgap measures to address network needs.

Because the networking infrastructure is the backbone of all other technology services, a comprehensive, professionally designed, reliable plan needs to be developed for the entire district. The plan should be affordable and scalable for the future. Great care should be taken to ensure the viability of its design for the long-term.

Support for the current network, as well as other technology, is provided by a few different vendors concentrating on different aspects of the operation. This has created inefficiencies and unnecessary costs for the district. Once a solid design has been established that can deliver reliable services to every district site, the district should competitively bid support services for the network to a single vendor with the appropriate expertise and willingness to provide support. This will streamline and improve efficiencies and accountability in this area. The higher-cost network services should be clearly categorized and distinguished from other types of support that are less expensive (e.g., PC support costs). Hiring district staff for this work, to the degree feasible, will likely reduce these costs and improve services even more.

The district lacks standards for equipment replacement and has limited standards for networking infrastructure in classrooms. Security policies are lacking at all levels of the organization with regard to network log-ons and wireless access in the schools. Students, teachers and administrators typically either use a generic log-on or do not log on to the network. While e-mail log-ons and financial system log-ons are utilized, a network logon should be required to identify a user who inappropriately accesses the Internet. The employee who administers the Lightspeed Internet filtering system (a school site aide) has not been trained on the software, which impedes the appropriate management of Internet access. Because monitoring Internet use could involve personnel actions, administration of the district's filtering system should be moved to a district technology management position.

Because of network bandwidth issues stemming from poor network design, the Voice over IP (VoIP) telephone system and its four-digit dialing is basically nonfunctional. Once the network is upgraded to an appropriate level of bandwidth, the district should analyze the capabilities of this system and fully implement it.

Clear guidelines for what is covered under network infrastructure support have not been communicated or standardized throughout the district. The district pays for infrastructure requirements such as network equipment and cabling to all classrooms, but has not consistently provided that support. For example, one user reported submitting a request for a Maintenance and Operations (M&O) staff member to repair a loose data jack in a wall outlet. An M&O staff member visited the site, reviewed the problem and told the site user that the repair could not be completed in-house and would have to performed by an outside vendor paid by the school.

The lack of clear, complete and consistent standards and planning also is evident at a high school site that was recently modernized. The equipment needed to complete the design (LCD projectors, etc.) was not bundled into the construction contract. This might have been an effective strategy to save some costs, but the equipment was never obtained. As a result, projector brackets hang from the classroom ceilings with no projectors or wiring. District and high school administrators have recently begun to address these problems, and the proposed technology director position would help ensure these kinds of conditions do not occur in the future. A new planning team has begun efforts to modernize another building at the high school site, and administrators are confident that all related technology issues have been addressed appropriately.

Recommendations

The district should:

1. Procure a network analysis and design from an independent, highly experienced third party with expertise and experience in school district needs. Include a thorough analysis of the microwave network and wireless infrastructure in schools. Consider an independent review of the design by another school district's network support team to ensure its reliability.

2. Once a detailed design is obtained, develop an implementation and funding plan (utilizing E-rate discounts).

3. Develop and implement additional standards for hardware and software to include warranty programs, capacity and speed. Include standards for the networking infrastructure and technology policies. Implement and enforce tighter security policies, and work to eliminate generic log-ons. Obtain any necessary additional software and use Active Directory tools.

4. Once staff is hired, transfer the responsibility for administering the Lightspeed system to the Technology Services department. Provide training for that employee so that all features can be utilized with the software.

5. Once staff is hired, review the VoIP telephone system and fully implement it after the network is upgraded.

6. Clearly delineate how payment is handled for network infrastructure projects and repairs. Consider contracting with a networking company to work one day a month on infrastructure projects.

Instructional Technology

The district's staff and students are enthusiastic about existing and potential technology in the classroom. The district has many technology applications and ample opportunity to expand their use. These applications include a variety of reading and language development programs at elementary and middle schools, and specialty programs at the middle and high schools for desktop publishing, Web development, instructional applications, and other purposes.

The chances of success are greatly increased with careful planning of instructional technology that is fully integrated with and supports the district's overall curricular goals. Instructional technology expenditures that constitute a passing trend or haphazard efforts often waste valuable resources that could be better spent on proven applications that deliver effective results.

According to the district's staff, the Governing Board recently approved the Enhancing Education Through Technology (EETT) plan. This new plan should be reviewed with consideration to the recommendations provided in this report.

The networking infrastructure issues noted above will need to be resolved before some technology applications can be implemented. However, even in the shorter term, the district can help prepare for improvements and increase access to instructional technology, and help prioritize and guide the district's investments.

For example, many highly rated instructional applications today are available in Web-based versions, so that the district could do the following:

- Purchase only as many licenses as are needed for that particular use.

- Avoid additional server or other hardware purchasing and maintenance costs.

- Centralize student performance data and potentially generate valuable information to assist with assessment, program evaluation and decision-making. For example, the district recently adopted SChoolPlan hosted by the Santa Clara County Office of Education to manage K-12 benchmark assessments. District administrators are using SChoolPlan centralize information and avoid duplication of information resources.

- Potentially share costs with another district or buying consortium.

- Access high-quality curricular resources at a low cost.

The technology support materials integrated with the district's current textbook adoptions could be a valuable resource. Most recent state adoptions come with a host of technology support materials. These resources are fully aligned and integrated into the existing curriculum, meet state standards, and can be used to streamline and improve existing instruction.

In most cases, those materials have already been purchased, but many districts have not fully trained teachers on their use or considered how they might be accessed, either via a demonstration teacher station or through check-out time in a lab. This appears to be a valuable untapped resource at River Delta Unified as well. A technology committee can assist with this type of planning and with other technology efforts.

The primary purposes of this committee would include:

- Assisting with assessing the technology hardware and software resources available for instructional use at every school site.
- Assessing the instructional applications in use at every site, including all current licensing arrangements and costs (so they can be evaluated for potential cost savings), versions in use, and whether they should be updated).
- Participating in processes designed to assist schools with determining their curricular priorities that might be well served with the use of available instructional technologies and determining which technology investments would still be needed. Staff from the California Technology Assistance Project (CTAP), Region 3, may be able to assist with these efforts.
- Assisting with the development of a districtwide technology plan that represents both the administrative and instructional "big picture" goals for the district, helping to ensure the district's priorities align, to the extent possible, with the schools' highest priorities.
- Assisting with a template, model and/or planning time for the sites to work on their own school-level technology plans, concentrating on the same categories of information (albeit on a smaller scale) as the district. These should include identifying curricular goals, professional development and infrastructure needs, funding needs and monitoring/evaluation of the plan. The plans should be at least three years in scope, and should include priorities for which there may not be existing funding. If funding becomes available, the plan will be ready with the information needed to proceed.

Professional development for teachers is essential to the effective use of instructional technology, and is a major challenge for most districts. CTAP is designed to assist smaller districts with this type of professional development.

If funding is not available for a certificated educational technology specialist, one or two site technology liaisons at each school could be of great assistance. These individuals could be paid a small stipend to assist with communicating site needs; coordinating with the district; and helping build a sense of districtwide community, sense of purpose and focus on technology. Some districts have a site technology manager for hardware and another for software or professional development to ensure that each site knows who to contact for help.

Recommendations

The district should:

1. Reconstitute the technology committee and establish a technology committee meeting schedule. Technology committee meetings should be conducted monthly and should be chaired by the chief of educational services. Meeting discussions should focus primarily on prioritization of technology resources to support instruction.

2. Review the new Enhancing Education Through Technology (EETT) plan in light of the recommendations contained in this report.

3. Identify one or more site liaisons for each school who can help collect compile essential information needed by the district to guide its efforts, and who can facilitate communications to the sites as needed. Hold monthly meetings with the site liaisons and the district technology team.

4. Using information gathered from the sites, verify whether any instructional applications are widely in use across the district, and if so, determine whether centralized purchasing of the licensing for those applications could save funds. Consider joining with other districts or buying consortia in this endeavor.

5. Assign any district lead teachers or other curriculum specialists to review currently available textbook adoption technology support materials and determine the following;

    - What is already in use

    - What would be required to effectively implement existing materials, even on a pilot basis to start.

    Consider placing some of these specialists on the district technology steering or planning committee since this may be an important component of the plan.

6. Meet with the Region 3 CTAP representatives at the Sacramento County Office of Education to determine how CTAP can provide additional help and support.

Appendix

Appendix A - Study Agreement

FISCAL CRISIS & MANAGEMENT ASSISTANCE TEAM
STUDY AGREEMENT
September 15, 2008

The FISCAL CRISIS AND MANAGEMENT ASSISTANCE TEAM (FCMAT), hereinafter referred to as the Team, and the River Delta Unified 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 River Delta Unified 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)   Review the organizational structure and staffing for technology services delivery and make recommendations for improvement.
2)   Conduct a review of the district's administrative technology and make recommendations for improvement.
3)   Conduct a review of the district's instructional technology and make recommendations for improvement.

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.

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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. Greg Linder, FCMAT Technology Consultant
C. Kelly Calhoun, 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.

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 $5,500. 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.

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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 River Delta Unified School District pupils. The District shall take appropriate steps to comply with EC 45125.1(c).

6.   PROJECT SCHEDULE

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

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

7.   CONTACT PERSON

   Please print name of contact person: Robert Hubble, Chief Education Services Officer

   Telephone ____(707) 374-1725____   FAX (707) 374-2901_____

   Internet Address rhubbell@riverdelta.k12.ca.us _____

   _____

   Rick Hennis, Superintendent   Date
   River Delta Unified School District

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Barbara Dean   September 15, 2008

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.