

Information Technology Capital Plan

Department of Education 2008-2009



Information Technology Capital Plan, Plan Year 2009-10 through 2013-14 Executive Approval Transmittal

Department Name

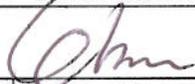
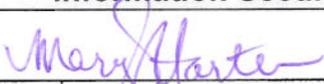
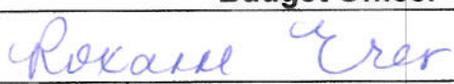
California Department of Education

APPROVAL SIGNATURES

I am submitting the attached Information Technology Capital Plan as required by the State Administrative Manual Section 4904.

I certify that the IT Capital Plan was prepared in accordance with State Information Management Manual section 57 and that the proposed IT projects are consistent with our business strategies and information technology strategy.

I have reviewed and agree with the information in the attached Information Technology Capital Plan.

Chief Information Officer		Date Signed
		10/1/08
Printed name:	Kevin Matsuo	
Information Security Officer		Date Signed
		10/1/08
Printed name:	Mary Harter	
Budget Officer		Date Signed
		10/1/08
Printed name:	Roxanne Eres	
Department Director Designee		Date Signed
		10/1/08
Printed name:	Susie Lange	

DEPARTMENT IT CAPITAL PLAN

Department Name and Org Code:

Education / 6110

Plan Year:

2009-10 through 2013-14

1. Summarize your organization's business goals and objectives below:

The California Department of Education (CDE) oversees the state's diverse and dynamic public school system that is responsible for the education of more than seven million children and young adults in more than 9,000 schools. The CDE and the State Superintendent of Public Instruction are responsible for enforcing education law and regulations; and for continuing to reform and improve public elementary school programs, secondary school programs, adult education, some preschool programs, and child care programs. The CDE's mission is to provide leadership, assistance, oversight, and resources so that every Californian has access to an education that meets world-class standards. The CDE is committed to working in partnership with local schools to improve student achievement. The CDE's goals include:

- Holding LEAs accountable for student achievement in all programs and for all groups of students.
- Building local capacity to enable all students to achieve state standards.
- Expanding and improving a system of recruiting, developing, and supporting teachers that instills excellence in every classroom, preschool through adult.
- Providing statewide leadership that promotes effective use of technology to improve teaching and learning.
- Increasing efficiency and effectiveness in administration of kindergarten through grade twelve education, including student record keeping, and good financial management practices.
- Providing broader and more effective communication among the home, school, district, county, and state.
- Establishing and fostering systems of school, home, and community resources that provide the physical, emotional, and intellectual support that each student needs to succeed.
- Advocating for additional resources and flexibility, and providing statewide leadership that promotes good business practices, so that California schools can target their resources to assure success for all students.
- Improving the effectiveness and efficiency of the Department.

2. What are your organization's plans to upgrade or replace your IT infrastructure for the following? When responding, please indicate the timeframes of your intended upgrade or replacement efforts.

No additional upgrades are currently planned. The Department is completing their transition to Microsoft (MS) Exchange from GroupWise, and will complete a transition from Track-IT to Numara Footprints as our Help Desk/Change Management software by the end of the year.

2.1. Hardware

See question #2 above.

2.2. Software

See question number two above.

2.3. Network

See question number two above.

3. Existing Approved Reportable IT Projects

Provide the following information regarding your existing approved reportable IT projects on Table 1 on the following page:

- Existing IT Project;
- Approved Project Cost;
- Project Number; and
- Implementation Date

4. Proposed IT Projects

After each proposed IT project has been documented by answering questions 4.1 through 4.15 of the attached IT Project Proposal Form, provide the following information on Table 2 on the following page:

- The name of each proposed IT project;
- The priority ranking;
- The FSR submission date; and
- The estimated cost

Table 1-Existing Approved Reportable IT Projects Summary by Department

Existing IT Project	Approved Project Cost*	Project Number	Implementation Date
Provider Accounting and Reporting Information System (PARI\$)	\$ 3,517,896	6110-98	May 2011
California Longitudinal Pupil Achievement Data System (CALPADS)	\$42,635,000	6110-92	May 2010
Child Nutrition and Information Payment System (CNIPS) Project	\$ 8,592,842 \$ 9,863,296	6110-93	June 2009 June 2010
Teacher Data System (TDS)/ California Longitudinal Teacher Integrated Data Education System (CALTIDES)	\$14,615,100	6110-97	November 2009

*Note: If a Special Project Report (SPR) was submitted for review in July 2008 that includes project costs that differ from the last approved project document, enter both the last approved project cost and the revised project cost from the SPR under review.

Table 2-Proposed IT Project Summary

Proposed IT Project	Priority Ranking	FSR Submission Date	Estimated Total Cost
Brokers of Expertise (BOE)	1	October 2008	\$ 11,950,000
Standardized Account Code Structure (SACS) System Replacement Project (SACS SRP)	2	August 29, 2008	\$ 5,955,547
McKinsey Project/ California Continuous Improvement for Student Achievement (CaCISA) Project FSR DEVELOPMENT*	3	July 2010	\$ 400,000
California Accountability Improvement System (CAIS)	4	October 2008	\$ 1,450,000
Principal Apportionment Software Evaluation and Rewrite Project FSR DEVELOPMENT*	5	July 2010	\$ 300,000
Establishment of the California Autism Spectrum Disorder (ASD) Clearinghouse	6	December 2008	\$ 803,000

*Note: **Currently there is no IT Project Proposal Form.** The McKinsey and Principal Apportionment BCP will request funds for developing a feasibility study report. **IT Project Proposal Form information is unknown at this time.** It is expected that the FSRs for the McKinsey Project and Principal Apportionment will be submitted July 2010.

Proposed IT Projects

Complete this IT Project Proposal Form (questions 4.1 through 4.15 below) for each proposed IT project that meets the definition of a reportable project as defined in the State Administrative Manual Section 4819.37.

Brokers of Expertise (BOE)

4.1. Proposal name and priority ranking:

- Proposal Name: Brokers of Expertise
- Ranking Priority: #1

4.2. Description of the proposed IT project:

The BOE project will be accomplished by building and piloting for one year, a web-based content management system that aligns all content to state educational standards. This process will allow educators and other key participants to view and contribute educational content that is consistently aligned with California Content Standards. Examples of content include standards-aligned lesson plans, instructional materials, instructional practices, and virtual demonstrations. BOE will include the use of contemporary social-networking features for the purpose of developing a community of participants that produce high quality content that is suitable for use by other educators.

The technical configuration has not been finalized, however, our primary coordinating agency, the California K-12 High Speed Network has been selected to assist us in answering questions about the final configuration. These solutions will depend on partner expertise, cost, and application framework. The pilot phase will allow us to test and evaluate all of the technical components as well as user satisfaction and utility. This evaluation will inform all adjustments and modifications to the system so that BOE can deliver on its goal of improving teaching and learning in California to help close the achievement gap.

4.3. Which of your department's business goals and objectives does this project support, and how?

One of the CDE's key business goals is to provide leadership, assistance, oversight and resources so that every Californian has access to an education that meets world-class standards. BOE is an efficient and cost effective way for CDE to make available resources and assistance of the highest quality to over 1,000 Local Education Agencies (LEAs) throughout the State. The ultimate outcome, however, is to create the capacity at the state level to provide real time assistance to low-performing schools that continue to struggle to raise student achievement. Specifically, BOE's overall mission objectives are to:

1. Improve teaching and learning by providing practitioners with easily attainable information that allows them to institute workable strategies for individual students and classes with unique needs and challenges.
2. Expand the CDE from a compliance organization into a value-added organization that better helps to improve teaching and learning.

3. Develop a model that is replicable throughout the country and helps State Education Departments (SEDs) and LEAs to improve teaching and learning.
4. Result in yearly increased usage of the database and demonstrably improved learning through the Standardized Testing and Reporting Program (STAR) and Academic Performance Index (API) scores and a narrowing of the achievement gap.
5. To meet the recommendation of the P-16 Closing the Gap Council to provide a vehicle for better sharing of best practices and resources across the State.

BOE also meets two important state objectives. By utilizing County Offices of Education (COEs) across the State and serving as a meta-portal, integrating important educational resources, it meets Objective 2 of Goal 1 of California's Information Technology Strategic plan which seeks to: "Leverage services between state agencies, Federal and local government and promote interagency and intergovernmental data sharing." Objective 2 of Goal 4 of the strategic plan also calls for the consolidation of technology infrastructure and services. By providing a state-wide portal for resources, BOE will lower costs and prevent redundancies in the system.

Other key business goals and objectives supported by the BOE project are:

Goal 2: Building Capacity

Build local capacity to enable all students to achieve to state standards.

BOE will develop a system of information and best practices sharing to support teachers and administrators in their goal to improve their own teaching and administrative skills.

Goal 3: Professional Development

Expand and improve a system of recruiting, developing and supporting teachers that instills excellence in every classroom, preschool through adult.

BOE will connect researchers, academics at the university level, school administrators, aspiring teachers, new teachers, and experienced teachers to learn from each other. It will provide resources for educators to learn from each other, and support each other in order to improve their teaching practices.

Goal 4: Technology

Provide statewide leadership that promotes effective use of technology to: improve teaching and learning; increase efficiency and effectiveness in administration of K-12 education, including student record keeping and good financial management practices; and provide broader and more effective communication among the home, school, district, county, and state.

BOE will promote improved student learning and academic achievement through more effective use of technology by putting tools, resources, and information at the fingertips of educators, students, parents, researchers, and academia.

4.4. What are the expected business outcomes or benefits of the proposal as they relate to your organization's business goals and objectives?

1. BOE will provide tools and a common structure for educators, administrators, researchers, and academics to access each other within their communities and throughout the state, ending their regional isolation.
2. BOE will provide all schools in California, regardless of their performance level with the benefit from increased knowledge about how to close the achievement gap and to raise student achievement levels.
3. BOE will create the capacity at the state level to provide real time assistance to low-performing schools that continue to struggle to raise student achievement. Specifically, BOE is expected to:
 - Improve teaching and learning by providing practitioners with easily attainable information that allows them to institute workable strategies for individual students and classes with unique needs and challenges.
 - Expand the CDE from a compliance organization into a value-added organization that better helps to improve teaching and learning.
 - Develop a model that is replicable throughout the country and helps SEDs and LEAs to improve teaching and learning.
 - Result in yearly increased usage of the database and demonstrably improved learning through the STAR and API scores and a narrowing of the achievement gap.
4. BOE will benefit the state by having much better informed educators with the knowledge, assistance, and resources needed to perform their jobs with higher quality tools at their disposal. Specifically, the CDE will benefit by having a more cost effective way of reaching educators to provide them assistance and tools necessary to teach. LEAs and educators will benefit by having assistance and resources at their fingertips on a 24/7 basis to help their struggling students and support their instructional practices. And Students will benefit by receiving sound instructional resources and practices delivered by supported teachers.

As indicated in Section 4.3 above, providing leadership, assistance, oversight, and resources is a very high priority for the CDE. The outcomes described in this section directly relate to the CDE's business goals and objectives by:

- Providing leadership in bringing California's educators together to harness the power of their combined knowledge.
- Providing critically needed assistance to educators through sharing best and promising practices, sharing research, exchanging ideas from other educators, and providing electronic and hands-on support to educators most in need.
- Providing a level of oversight of the educational resources to assure these resources are vetted, trusted, and aligned to California's Content Standards.
- Providing much needed resources to educators that are trusted and presented in a quick searchable manner.

4.5. The following are from the State's IT strategic plan. Check the appropriate box(es) to identify the goals this proposal supports:

- Supporting and enhancing services for Californians and businesses
- Enhancing information and IT security
- Reducing state operational costs (leveraging, consolidation, new technology, etc.)
- Improving the reliability and performance of IT infrastructure
- Enhancing human capital management
- Supporting state and agency priorities and business direction

4.6. Is the proposal consistent with your organization's Enterprise Architecture?

- Yes
- No

If no, please explain why the deviation from the organization's Enterprise Architecture is necessary.

The CDE does not have a documented Enterprise Architecture. However, the application being developed is consistent with CDE's technical standards.

4.7. Will the proposed system collect, store, transmit, or exchange confidential or sensitive information?

- Yes
- No

4.8. If this proposal is conceptually approved, what is the estimated date (mm/yyyy) the FSR will be submitted?

10/2008

4.9. What is the estimated project start date (mm/yyyy) if the FSR is approved?

10/2008

4.10. What is the duration of the proposed project?

Approximately 2 years.

4.11. Will the proposed project utilize the existing infrastructure?

- Yes
- No

If no, please explain.

There is no existing application infrastructure specific for this project. However, numerous county offices and other educational organizations within the state do have systems highly relevant to the outcomes of this project. During this pilot project, a number of these systems will be evaluated to determine which systems can be incorporated into the BOE solution and

which systems should be documented so similar functionality can be re-implemented within the BOE solution.

The California K-12 High Speed Network as well as the California County Superintendents Educational Services Association (CCSESA) and other partners will conduct a broad search for suitable systems which already exist. In partnership with the BOE team they will build a strategy for integrating the appropriate systems into a functional partnership. Additional technology will be designed and built specifically for BOE based on the specific partnership platform that exists at the end of this initial process.

4.12. Is the proposal related to another proposal or to an existing project?

- Yes
- No

If yes, describe the related proposal or project and how it is related:

4.13. Describe the consequences of not doing this proposed project at the planned timeframe:

Fully developing BOE will be a time consuming project that will take at least two years to pilot test on a limited scope and limited content area basis. Failure to begin this project expeditiously will prevent educators from using the resources provided by BOE. This should be of highest concern to every person in California. Withholding the vital information promised by BOE would mean that the achievement gap would be perpetuated even longer, that educators would need to wait to gain access to quality, vetted, content aligned materials for even longer, and that CDE's promise of leadership, assistance, oversight, and resources would be postponed even longer.

4.14. Check the appropriate box(es) to identify the proposal's funding strategy:

- Augmentation needed
- Redirection of existing funds
- Other (describe):

4.15. What are the estimated cost and funding source(s) by fiscal year through implementation (information should be provided in the following format):

Fund Source	2009-10	2010-11	2011-12	2012-13	2013-14 and future	Total
General Fund	\$ 150,000	\$1,700,000	\$1,700,000	\$1,700,000	\$1,700,000	\$6,950,000
Federal Fund	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$5,000,000
Special Fund						
Total	\$1,150,000	\$2,700,000	\$2,700,000	\$2,700,000	\$2,700,000	\$11,950,000

* Note: Identify the fund source and if the department is the sole user of the fund.

Standardized Account Code Structure (SACS) System Replacement Project (SACS SRP)

4.1. Proposal name and priority ranking:

- Standardized Account Code Structure System Replacement Project
- Priority Ranking: #2

4.2. Description of the proposed IT project:

In 1994, the Legislature enacted Senate Bill (SB) 94 (Chapter 237, Statutes of 1994) to address a growing concern for LEA fiscal accountability, improved detection and disclosure of school district solvency issues, and uniformity in reporting of financial data to support the development and enhancement of statewide education programming. SB 94 called for development of a standardized structure for financial management and reporting of LEA financial data.

In support of SB 94, the automated SACS System was adapted from existing legacy software to allow collection of LEA financial information in the new standard format. The SACS Software component, in use today, was initially made available to LEAs in 1998. For the first time, LEAs could report financial data that included the fund, resource, project year, goal, function, object, and school for every general ledger accounting transaction. With it, CDE could collect, validate, and analyze LEA financial data and make use of it in reports to state and federal entities, the public, and other CDE program areas in the required SACS format. The system proved effective and with its support CDE was able to meet the requirements of SB 94 successfully.

In the fourteen years since the introduction of SB 94, the State's educational information needs have continued to evolve. New initiatives, programs or code changes have introduced additional data collection and reporting responsibilities for CDE. The most significant of these is Education Code Section 42100, which requires that charter schools submit their financial data to CDE. Further, related regulations allow that charter schools may report in an alternative format rather than in SACS. This change has increased the number of LEAs from whom CDE must collect data by 64%, from approximately 1,100 to over 1,800, and the number of charter schools is expected to continue to grow. It also added a second reporting format in which CDE must collect data. In addition, CDE anticipates that it may be required to collect school-level data in the near future. This change will introduce as many as 9,674¹ new data collection points alone.

Continual evolution of reporting needs, additional charter schools, and the possible requirement for school-level reporting, has caused CDE to become increasingly concerned with the SACS System's ability to meet business requirements, but technical issues are a pressing concern regarding the SACS System. With over 10 years of modification, adaptations, extensions, and retrofits, the SACS System is now comprised of four separate components that were developed and implemented over time to address different reporting objectives. These four related, but separate, components that now make up the "SACS System" operate inter-dependently. Sustainability of the system is hampered because the SACS System is built upon a number of underlying software applications and tools for which

¹ California Department of Education, Educational Demographics Office (California Basic Educational Data System, Data Files: assign06 7/3/07, pubschls 9/1/07, sfib0607 5/14/07)

the manufacturers no longer provide maintenance, upgrades, or customer support and that are not compliant with current CDE Information Technology and Security Standards. In addition, because the system evolved over time and because it was adapted from a legacy system within budgetary constraints and the technological limitations of its day, it was not designed and implemented as a single, integrated system. As such, the workflow between these system components relies heavily on manual processes.

Collectively, these issues severely limit the capability, functionality, efficiency, and ultimately the viability of the SACS System to meet CDE current and future business needs. The IT project goal will be to replace the current legacy SACS System with a replacement system that is built on current technology. It will leverage existing enterprise services, software, hardware, and network currently used or licensed by CDE and will comply with CDE standards including software, hardware, security, Internet, software development, enterprise architecture (EA), and other applicable standards. It will eliminate CDE's dependence on outside programmers.

4.3. Which of your department's business goals and objectives does this project support, and how?

CDE's mission is to provide leadership, assistance, oversight, and resources in order that every Californian will have access to an education that meets world-class standards. To accomplish its mission, CDE works in partnership with school districts, county offices of education, joint power agencies, and charter schools (collectively known as local educational agencies or LEAs²) to improve student achievement and to provide oversight, resources, assistance, and leadership to state educational programs.

CDE's goals in support of its mission include:

- Increasing efficiency and efficacy in administration of kindergarten through grade twelve education, including student record keeping, and good financial management practices.
- Advocating for additional resources and providing statewide leadership that promotes good business practices, so that California schools can target their resources to assure success for all students.
- Continuous improvement in the overall efficacy and efficiency of CDE.

In response to the provisions of SB 94, CDE developed the SACS to accomplish the following objectives:

- Establish a uniform, comprehensive, and minimum chart of accounts to be used statewide to improve LEA financial data collection, reporting, transmission, accuracy, and comparability.
- Reduce the administrative burden on LEAs in preparing required financial reports.
- Meet federal compliance guidelines and increase the opportunities for California to receive federal funding for education programs.
- Ensure that LEAs comply with generally accepted accounting principles (GAAP) as prescribed by the Governmental Accounting Standards Board (GASB).
- Create a logical framework that can be used to document the source of education funds and determine how they are used.

² For purposes of this report, the term LEA is extended to include charter schools.

- Provide better information for use by administrators, parents, board members, legislators, and others interested in school finance.

The objectives of SACS outlined above and the proposed system support CDE's mission and goals in several important ways:

- Provide fiscal oversight to LEAs to ensure their fiscal solvency.
- Provide LEAs with assistance and advice on matters affecting budgeting, accounting, reporting, and financial management practices in accordance with statewide policy and accounting standards.
- Provide timely and accurate collection and review of statewide LEA financial data.
- Report LEA financial data to the state and federal governments, other CDE program areas, and the public.

4.4. What are the expected business outcomes or benefits of the proposal as they relate to your organization's business goals and objectives?

CDE's Financial Accountability and Information Services (FAIS) Office's core mission will continue to focus on timely and accurate collection, review, and reporting of LEA financial data and LEA fiscal oversight. The proposed solution will change FAIS' future processes in several important ways to fully meet CDE's business objectives and address the problems identified in Section 4.13.

- The proposed solution will eliminate dangerous dependency on unsupported and obsolete technology, comply with CDE information technology standards, and allow CDE and LEAs to redirect significant time and effort back to their primary program responsibilities.
- The proposed solution will eliminate all software downloads, installations, and upgrades by LEAs and CDE users, as CDE will perform updates to the centrally located multi-user Web-based solution. This will save an estimated 32,000 hours annually among more than 1,800 LEAs throughout the State.
- The proposed solution will provide multi-user capability that will allow LEAs concurrent access to the new system.
- LEAs will have access to historical SACS data using the Web-based solution.
- CDE will make updates to business rules, application configuration and code, and reports in only one system. In many cases updates will not require programmers due to the configurable nature of the proposed solution. Once updates are applied to the production Web-based system they will be instantly available to all LEAs. The proposed solution will reduce CDE maintenance time by an estimated 33% (2,500 hours) over the current non-integrated SACS System.
- The proposed solution will allow CDE to maintain the new system internally without contractors through the use of supported software that leverages CDE technology standards. This ensures that many training options are available for CDE staff.
- The alternative format allowed for charter schools will be integrated into the proposed solution, reducing CDE's effort to collect and review LEA financial data by an estimated 17% (650 hours).
- The LEA budget and interim reporting processes will be automated thus eliminating the need for LEAs to mail printed paper copies or e-mail electronic media to their reviewing agencies.

- Most business rules will no longer be hard-coded into the system and will be configurable by CDE analysts without the need for a programmer.
- All data submissions that require certification will leverage the digital signature capabilities of the system, eliminating the need for the submission of “wet ink” signatures.
- The automated workflow capability will execute prescribed routing of information between LEAs and CDE to perform a variety of tasks including data submission, certification, review, and approval. This will reduce CDE’s time processing LEA financial data by approximately 6% (240 hours).

4.5. The following are from the State's IT strategic plan. Check the appropriate box(es) to identify the goals this proposal supports:

- Supporting and enhancing services for Californians and businesses
- Enhancing information and IT security
- Reducing state operational costs (leveraging, consolidation, new technology, etc.)
- Improving the reliability and performance of IT infrastructure
- Enhancing human capital management
- Supporting state and agency priorities and business direction

4.6. Is the proposal consistent with your organization's Enterprise Architecture?

- Yes
- No

If no, please explain why the deviation from the organization's Enterprise Architecture is necessary.

The CDE does not have a documented Enterprise Architecture. However, the application being developed is consistent with CDE’s technical standards.

4.7. Will the proposed system collect, store, transmit, or exchange confidential or sensitive information?

- Yes
- No

4.8. If this proposal is conceptually approved, what is the estimated date (mm/yyyy) the FSR will be submitted?

The FSR for the SACS System Replacement Project was submitted to OCIO on August 29, 2008.

4.9. What is the estimated project start date (mm/yyyy) if the FSR is approved?

*Project Start Date: 01/2011**

*This date reflects the beginning of Phase 3, Development and Implementation. The next step in the project would be the procurement of the project management, Request for Proposal (RFP), and Independent Project Oversight Consultant (IPOC) vendors starting 03/2009 in preparation for the development vendor procurement.

4.10. What is the duration of the proposed project?

*Project Duration: 01/2011 – 03/2012**

*The dates above reflect Software Development Life Cycle (SDLC) of the project from design through implementation. Note the start date qualification above in question 4.9 related to the procurement phase. A post-implementation review is planned for completion in 06/2013 following implementation.

4.11. Will the proposed project utilize the existing infrastructure?

- Yes
 No

If no, please explain.

4.12. Is the proposal related to another proposal or to an existing project?

- Yes
 No

If yes, describe the related proposal or project and how it is related:

4.13. Describe the consequences of not doing this proposed project at the planned timeframe:

The FSR for the SACS System Replacement Project identified the following business problems:

1. CDE's ability to provide LEA financial reporting and fiscal oversight is at risk of failure because the applications and tools underlying the SACS System are out of date, are no longer supported by the manufacturers, and cannot simply be replaced piece-for-piece.
2. CDE's ability to provide LEA financial reporting and fiscal oversight is at risk of failure due to the diminishing pool of individuals with institutional knowledge and expertise to maintain and support the outdated applications used in the legacy SACS System.
3. Changes to LEA reporting requirements, particularly the addition of the alternative reporting format allowed for charter schools, have resulted in a significantly increased manual workload for CDE staff due to the limited ability of the SACS System to adapt to change.
4. CDE is forced to redirect significant time and effort from its primary responsibilities to maintain the system because the lack of integration between the four components of the system necessitates manual processes and redundant effort.
5. LEAs must spend excessive amounts of time downloading, installing, and updating the SACS Software in preparation for financial reporting because the software is designed for installation on one personal computer (PC) at a time. Those LEAs that install the software on multiple PCs must spend additional time merging the data from those PCs onto one PC because the software lacks multi-user capability.

If these problems are not addressed with the proposed solution to replace the existing system, CDE would need to pursue an alternative approach to maintaining the legacy system as a consequence. This alternative would require CDE to continue use of an outside vendor to perform maintenance of the SACS Software, and would require CDE to search for resources with the knowledge, skills, and experience to support the outdated, unsupported

applications and tools underlying the SACS System. CDE staff cannot indefinitely support outdated technologies including Formula One, Visual Basic (VB) 6.0, InstallShield 7.04, SQL Anywhere 5.0, Crystal Reports 8.5, and Excel 97 and have very limited expertise in programming with these applications and tools. In addition, at any time the legacy software could cease to work with newer platforms due to the outdated technologies. So far we have encountered two such unresolved occurrences.

Update of these outdated tools would require the engagement of a contracted vendor to perform the following software enhancements to address the current problems:

- Identify a solution to replace the legacy Formula One product. This software is no longer made. Custom built functionality may be required using VB.NET.
- Rewrite VB 6.0 application code in VB.NET for the SACS Software, Workflow, and SACS Maintenance applications. The system code rewrite must adhere to industry best practices such as object-oriented design and centralized business rules.
- Migrate all SACS Software data from the Sybase SQL Anywhere database to a new, supported database technology that runs on a local workstation.
- Replace Excel 97 with Excel 2003, test to determine if the update was successful.
- Replace InstallShield 7.04 with an updated installation product.
- Upgrade or replace Crystal Reports 8.5.
- Create SACS System design and as-built technical documentation.

4.14. Check the appropriate box(es) to identify the proposal's funding strategy:

- Augmentation needed**
- Redirection of existing funds**
- Other (describe):**

4.15. What are the estimated cost and funding source(s) by fiscal year through implementation (information should be provided in the following format):

Fund Source	2009-10	2010-11	2011-12	2012-13	2013-14 and future	Total
General Fund	\$ 976,414	\$2,635,046	\$1,521,234	\$ 421,739	\$ 401,114	\$5,955,547
Federal Fund						
Special Fund*						
Total	\$ 976,414	\$2,635,046	\$1,521,234	\$ 421,739	\$ 401,114	\$5,955,547

* Note: Identify the fund source and if the department is the sole user of the fund.

McKinsey Project/California Continuous Improvement for Student Achievement (CaCISA) Project FSR Development

4.1. Proposal name and priority ranking:

- California Continuous Improvement for Student Achievement (CaCISA) Project aka McKinsey Project FSR Development
- Priority Ranking: #3

4.2. Description of the proposed IT project:

This project would contract for the development of a FSR to study alternatives and recommend an alternative for a comprehensive statewide student information system as recommended in the McKinsey Report for the Governor's Office and the CDE.

Effective implementation of the first five recommendations from the McKinsey report will result in a comprehensive statewide student information data system that will lead to increased student achievement by enhancing the quality, accessibility, and the basic use of the current K-12 data system.

Proposed CaCISA Development and Implementation

The cost of CaCISA is based on estimates from the McKinsey report and includes development, implementation, and ongoing costs for completion of the first five recommendations. The total cost is \$66,800,000. Of that amount, \$21,300,000 will be used in BY+1 and \$45,500,000 would be used in BY+2. The amounts listed are for the costs of developing and implementing CaCISA at the state level only and do not include costs that LEAs may incur for upgrades to their local data systems.

Although none of the first five McKinsey recommendations are currently being implemented in California, components of each of the McKinsey recommendations are successfully being implemented in other states.

4.3. Which of your department's business goals and objectives does this project support, and how?

- Holding LEAs accountable for student achievement in all programs and for all groups of students.
- Building local capacity to enable all students to achieve state standards.
- Expanding and improving a system of recruiting, developing, and supporting teachers that instills excellence in every classroom, preschool through adult.
- Providing statewide leadership that promotes effective use of technology to improve teaching and learning.
- Increasing efficiency and effectiveness in administration of kindergarten through grade twelve education, including student record keeping, and good financial management practices.
- Providing broader and more effective communication among the home, school, district, county, and state.

- Establishing and fostering systems of school, home, and community resources that provide the physical, emotional, and intellectual support that each student needs to succeed.
- Advocating for additional resources and flexibility, and providing statewide leadership that promotes good business practices, so that California schools can target their resources to assure success for all students.
- Improving the effectiveness and efficiency of CDE by fulfilling one of the recommendations of the McKinsey report, the Department would make progress towards the goal of closing the academic achievement gap that exists among students.

Taken together, the McKinsey report's step-by-step ten recommendations form a strategy that builds on California's existing data systems and integrates technological, governance and cultural changes to achieve a vision for continuous learning in California that will have the greatest impact on student achievement.

4.4. What are the expected business outcomes or benefits of the proposal as they relate to your organization's business goals and objectives?

CaCISA will provide information that allows educators and policymakers to make data driven decisions. For example, using data they would be able to determine:

- The effectiveness of specific programs, practices and instructional strategies.
- The impact that specific academic interventions have on student performance and the conditions that render them most effective.
- How to best appropriate funding to education at the state and LEA level.

This new data system called CaCISA will:

- Increase the accuracy and improve the quality and timeliness of the data collected.
- Improve transparency of information for all users by ensuring access to those who need it while maintaining privacy and security and providing the information in a user-friendly format.
- Develop user friendly reporting tools and reports.
- Develop a feedback mechanism to improve instruction, administration, and policymaking.
- Foster the use of data driven decision making by educators, parents, and policy makers to continuously improve instruction and student achievement.
- Enhance data collection by capturing key additional elements on students, teachers, and programs not collected by CALPADS and CALTIDES.
- Develop a bank of formative assessment items for districts and schools to use as a tool to assess a student's understanding of the concepts being taught and use to assist with instructional strategies.

4.5. The following are from the State's IT strategic plan. Check the appropriate box(es) to identify the goals this proposal supports:

- Supporting and enhancing services for Californians and businesses
- Enhancing information and IT security
- Reducing state operational costs (leveraging, consolidation, new technology, etc.)
- Improving the reliability and performance of IT infrastructure
- Enhancing human capital management
- Supporting state and agency priorities and business direction

4.6. Is the proposal consistent with your organization's Enterprise Architecture?

- Yes
- No

If no, please explain why the deviation from the organization's Enterprise Architecture is necessary.

The CDE does not have a documented Enterprise Architecture. However, the application being developed is consistent with CDE's technical standards.

4.7. Will the proposed system collect, store, transmit, or exchange confidential or sensitive information?

- Yes
- No

4.8. If this proposal is conceptually approved, what is the estimated date (mm/yyyy) the FSR will be submitted?

07/2010

4.9. What is the estimated project start date (mm/yyyy) if the FSR is approved?

04/2010

4.10. What is the duration of the proposed project?

Approximately 2 years

4.11. Will the proposed project utilize the existing infrastructure?

- Yes
- No

If no, please explain.

It is unknown at this time the resources will be required to fulfill the users' business requirements, and if it will be possible to leverage CDE's infrastructure assets at the time. Given the scope of the project, additional infrastructure will be required.

4.12. Is the proposal related to another proposal or to an existing project?

- Yes
 No

If yes, describe the related proposal or project and how it is related:

Summary of the McKinsey Recommendations

- Complete the first phase of the state's K-12 data systems. CALPADS and CALTIDES are the building blocks of California's data systems. They will provide the core K-12 information that will allow educators to track student achievement gains down to the student level, measure the dropout rate more accurately, and provide longitudinal educator data. CALPADS and CALTIDES are currently under development, they will be fully operational by 2011.
- Enhance the quality, accessibility and basic use of the state's K-12 data systems. Enhancing CALPADS and CALTIDES will promote information-driven decision-making and innovation in the classroom as well as at the state and district levels by eliminating redundancies in data input, creating easier-to-read reports to make information more accessible to users, and encouraging the use of available data.
- Expand the use of student information by building more advanced data systems. More advanced data systems will allow for best-practice sharing and collaboration among teachers, administrators, and other district personnel. A standardized system for informing educators about professional development opportunities will be another outcome of a more advanced data systems.
- Link K-12 system with pre-K, higher education, workforce, and social services data systems to inform decisions that extend beyond K-12. To enable teachers, administrators, and policymakers to make better-informed decisions about which interventions are most effective for specific students in specific settings, data must be linked to information outside of the current K-12 system, including pre-K, higher education, the workforce, foster care, criminal justice system, health, and social services.

4.13. Describe the consequences of not doing this proposed project at the planned timeframe:

While over the last six years, student's scores on the California Standards Tests (CSTs) have continued to make steady gains, a lot of work still needs to be completed. In 2008, only 46% of our students achieved scores of "proficient" or "advanced" on the English-language arts CSTs, and only 43% of our students achieved these levels on the math CSTs. Another staggering fact is the dropout rate. In the 2006-07 school year, 24.4% of California's high school students dropped out before graduating.

Serving our state's children fully and equitably is not only a moral duty; it is an economic necessity. A recent study from the California Dropout Research Project estimates that for each new high school graduate, California taxpayers will gain \$169,000 in additional tax revenues and save \$54,000 as a result of lower expenditures on crime, health, and welfare. Collective, the State of California will reap a social gain of \$392,000 over the lifetime of each new graduate when the costs of crime on victims and economic competitiveness are factored into the equation.

The State of California spends nearly \$60 billion a year on K-12 education. Yet, it has no comprehensive system for measuring the effectiveness of instructional programs. At the classroom, district and statewide levels, the lack of a comprehensive data system (and common strategy for using such a data system) prevents California educators and

policymakers from engaging in “continuous learning,” which has been identified as a hallmark of successful schools and districts.

4.14. Check the appropriate box(es) to identify the proposal's funding strategy:

- Augmentation needed
- Redirection of existing funds
- Other (describe):

4.15. What are the estimated cost and funding source(s) by fiscal year through implementation (information should be provided in the following format):

Fund Source	2009-10	2010-11	2011-12	2012-13	2013-14 and future	Total
General Fund	\$ 400,000					\$ 400,000
Federal Fund						
Special Fund*						
Total	\$ 400,000					\$400,000

* Note: Identify the fund source and if the department is the sole user of the fund.

California Accountability Improvement System (CAIS)

4.1. Proposal name and priority ranking:

- California Accountability Improvement System
- Priority Rank: #4.

4.2. Description of the proposed IT project:

The purpose of this project is to establish an online support system that offers both the CDE and California LEAs a more streamlined, organized and useful web-based Categorical Program Monitoring (CPM) process, and the ability to track progress on LEA and Improvement plans under NCLB. It includes an extensive discovery process, system design and development, implementation and support through June 2010. The software application will be hosted by CDE, and will therefore incur costs for hosting as well as routine maintenance and system support. The software development is funded through the California Comprehensive Center (CACC) grant. The CPM component of the project will be released as a pilot to Regions 4 and 10 in the 2008-09 School Year, and will be released throughout the state in the 2009-10 School Year. LEA Plan uploads and retention is an integral part of the CAIS system and is scheduled for use beginning in December 2008.

4.3. Which of your department's business goals and objectives does this project support, and how?

Holding LEA accountable for student achievement in all programs and for all groups of students.

Providing statewide leadership that promotes effective use of technology to improve teaching and learning.

The web-based system leverages internet connectivity and the use of electronic rather than printed documents. By moving to an electronic data gathering system, the Department uses common and well-established technologies to make its work more efficient, and provides a path for LEAs to follow suit in their own work.

Increasing efficiency and effectiveness in administration of kindergarten through grade twelve education, including student record keeping, and good financial management practices.

The web-based system encourages the use of standard record keeping from year to year in an electronic format, and facilitates distribution of those documents at the state and LEA, reducing duplication of requests and making administration more efficient.

Providing broader and more effective communication among the home, school, district, county, and state.

Improving the effectiveness and efficiency of the Department.

The web-based system facilitates direct, structured and persistent electronic communication via discussion threads and e-mails that are retained by the system and available for review

as needed. Reports generated by the system will be produced as Adobe Acrobat PDF files, which are commonly used and easily disseminated.

Improving the effectiveness and efficiency of the Department.

The web-based system is developed to support the Department's policies through the use of technology while reducing duplication of efforts, increasing communication between the Department and LEAs and supporting the electronic rather than physical distribution of information related to CPM.

4.4. What are the expected business outcomes or benefits of the proposal as they relate to your organization's business goals and objectives?

The resulting web-based application ties program monitoring with improvement functions both at the SEA and LEA levels, reducing duplication of effort and increasing cooperation in areas that are closely related but commonly segregated. It provides a direct communication path between CPM and LEA staff and allows LEA staff to upload evidentiary documents in an electronic format in advance of onsite visits. Prior review of these documents will allow staff to review their contents in advance of the onsite visit and provide more targeted assistance to LEAs during the onsite visit.

4.5. The following are from the State's IT strategic plan. Check the appropriate box(es) to identify the goals this proposal supports:

- Supporting and enhancing services for Californians and businesses
- Enhancing information and IT security
- Reducing state operational costs (leveraging, consolidation, new technology, etc.)
- Improving the reliability and performance of IT infrastructure
- Enhancing human capital management
- Supporting state and agency priorities and business direction

4.6. Is the proposal consistent with your organization's Enterprise Architecture?

- No
- Yes

If no, please explain why the deviation from the organization's Enterprise Architecture is necessary.

The CDE does not have a documented Enterprise Architecture. However, the application being developed is consistent with CDE's technical standards.

4.7. Will the proposed system collect, store, transmit, or exchange confidential or sensitive information?

- Yes
- No

4.8. If this proposal is conceptually approved, what is the estimated date (mm/yyyy) the FSR will be submitted?

Upon the direction of OCIO, this project is included the IT Capital Plan, but an FSR would not be required.

4.9. What is the estimated project start date (mm/yyyy) if the FSR is approved?

The project has been in progress since 02/2008. At that time CDE consulted the OCIO about how to proceed, and it was indicated to the Department to include the project in the IT Capital Plan for FY2008/09.

4.10. What is the duration of the proposed project?

The initial development phase was scheduled to be completed by September 30, 2008. Bug fixes, enhancements and support provided by the California Comprehensive Center will continue until June 30, 2010. This date coincides with scheduled expiration of funding on June 30, 2010. At that time maintenance and operations will be handed over to CDE.

4.11. Will the proposed project utilize the existing infrastructure?

- Yes
 No

If no, please explain.

4.12. Is the proposal related to another proposal or to an existing project?

- Yes
 No

If yes, describe the related proposal or project and how it is related:

4.13. Describe the consequences of not doing this proposed project at the planned timeframe:

Existing processes and procedures will remain in place. This timeframe coincides with the CACC ability to provide systemic support to the CDE. To delay the project may mean that the application will not be fully functional before the CACC's federal grant expires, resulting in increased costs to complete and debug the application.

4.14. Check the appropriate box(es) to identify the proposal's funding strategy:

- Augmentation needed
 Redirection of existing funds
 Other (describe): Federal funds from the No Child Left Behind act.

4.15. What are the estimated cost and funding source(s) by fiscal year through implementation (information should be provided in the following format):

Fund Source	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14 and future	Total
General Fund			\$ 75,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 225,000
Federal Fund			\$ 75,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 225,000
Special Fund	\$600,000	\$400,000					\$1,000,000
Total	\$600,000	\$400,000	\$150,000	\$100,000	\$100,000	\$100,000	\$1,450,000

*** Note: Identify the fund source and if the department is the sole user of the fund.**

WestEd NOTES: The amounts under 'special fund' reflect anticipated CACC costs. This funding concludes on June 30, 2010. We expect that this project may require between .25 and .5 full-time employees for technical support and maintenance ongoing, as well as any established TSD hosting costs. Additional development costs beyond the CACC contract would be optional.

Principal Apportionment Software Evaluation and Rewrite Project FSR Development

4.1. Proposal name and priority ranking:

- Principal Apportionment Software Evaluation and Rewrite Project FSR Development
- Priority Ranking: #5

4.2. Description of the proposed IT project:

The CDE proposes a project to update or replace the existing software and build out the capacity of the Integrated Apportionment System (IAS). The project would update the existing system, which is out of date and no longer supported, to allow the LEAs to submit their data through a more efficient system.

4.3. Which of your department's business goals and objectives does this project support, and how?

- Improving the effectiveness and efficiency of the Department.

A new platform would improve the efficiency of the submission of the data received from the LEAs to CDE. This system would also improve the submission of data from charter schools and school districts to the COEs. After the apportionment information is approved by COEs it would be immediately submitted to CDE for processing. CDE would no longer have to use multiple systems to import the data into the Apportionment Database. This would reduce the time needed to process the P-1, P-2, and Annual apportionments.

4.4. What are the expected business outcomes or benefits of the proposal as they relate to your organization's business goals and objectives?

Because the existing system is cumbersome and out-of-date, IAS customers would benefit greatly from a newly designed interface in a number of ways:

- Application interfaces that are designed in standardized and intuitive formats that are compatible with current working environments and are universally familiar to today's computer users. Consequently, user training and technical support would be streamlined and enhanced.
- The IAS now has several data collection components that must be installed at remote county and school district offices. The installation procedure is complex and somewhat troublesome, but with a new interface, the complexity and technical difficulties would be eliminated. A new platform would incorporate the speed, flexibility, and interactive capabilities of the Internet.
- A new platform would offer great flexibility in design, making it suitable for almost any business application that utilizes desktop computing. The Principal Apportionment consists of a highly dynamic set of business processes, and the added design flexibility would enable TSD to provide improved levels of technical assistance in the face of ever-changing business requirements.

4.5. The following are from the State's IT strategic plan. Check the appropriate box(es) to identify the goals this proposal supports:

- Supporting and enhancing services for Californians and businesses
- Enhancing information and IT security
- Reducing state operational costs (leveraging, consolidation, new technology, etc.)
- Improving the reliability and performance of IT infrastructure
- Enhancing human capital management
- Supporting state and agency priorities and business direction

4.6. Is the proposal consistent with your organization's Enterprise Architecture?

- Yes
- No

If no, please explain why the deviation from the organization's Enterprise Architecture is necessary.

The CDE does not have a documented Enterprise Architecture. However, the application being developed is consistent with CDE's technical standards.

4.7. Will the proposed system collect, store, transmit, or exchange confidential or sensitive information?

- Yes
- No

4.8. If this proposal is conceptually approved, what is the estimated date (mm/yyyy) the FSR will be submitted?

Agencies typically must submit FSRs for the 2010-11 fall budget process by July 2010 and for the spring process by January 2011. By appropriating funds in the 2009-10 budget, the CDE will have adequate time to select a contractor and for the study to be performed by the required deadlines.

4.9. What is the estimated project start date (mm/yyyy) if the FSR is approved?

If the FSR is approved, the project would tentatively start in fiscal year 2011/12.

4.10. What is the duration of the proposed project?

The duration of the project is estimated to be approximately two years.

4.11. Will the proposed project utilize the existing infrastructure?

- Yes
- No

If no, please explain.

4.12. Is the proposal related to another proposal or to an existing project?

- Yes
 No

If yes, describe the related proposal or project and how it is related:

4.13. Describe the consequences of not doing this proposed project at the planned timeframe:

The IAS is a mission-critical system that supports the majority of California's public school education apportionments. An October 2007 Needs Assessment pointed to the following issues with the IAS.

- The IAS was built on older technology. Microsoft Corporation discontinued VB version 6.0 in 1999, before the IAS was fully complete; however, control agencies would not allow the CDE to change the system design. As of April 2008, Microsoft no longer supports the program, which means that it will no longer provide critical support, such as updates or security fixes. Additional problems could occur in the future as operating systems and processor bit-levels change. If this happens, LEAs may not be able to use the CDE software.
- The IAS still lacks needed functionality, such as reconciliation and reporting features. Consequently, the CDE must use side systems, which create dependencies on a few key staff.
- The file export and import process should be enhanced to eliminate the remaining amount of manual intervention by the CDE. These manual processes increase the risk of errors that may be difficult to detect or costly to fix.
- Any system changes must be made twice: once to the field software application and once to the in-house application.

The CDE must address these issues by finding an appropriate technology solution to ensure accurate and timely apportionments and to avoid putting the State at risk of violating statutory provisions or over or under-funding LEAs.

4.14. Check the appropriate box(es) to identify the proposal's funding strategy:

- Augmentation needed
 Redirection of existing funds
 Other (describe):

4.15. What are the estimated cost and funding source(s) by fiscal year through implementation (information should be provided in the following format):

Fund Source	2009-10	2010-11	2011-12	2012-13	2013-14 and future	Total
General Fund	\$ 345,000					\$ 345,000
Federal Fund						
Special Fund*						
Total	\$ 345,000					\$ 345,000

* Note: Identify the fund source and if the department is the sole user of the fund.

Establishment of the California Autism Spectrum Disorder (ASD) Clearinghouse

4.1. Proposal name and priority ranking:

- Establishment of the California Autism Spectrum Disorder Clearinghouse
- Priority Rank: #6

4.2. Description of the proposed IT project:

This IT project would create a statewide clearinghouse for information on the findings of educationally related, research-based, recommended practices to support children with autism that could be disseminated to schools, parents, and other interested parties through a Web site referred to as the California ASD Clearinghouse.

4.3. Which of your department's business goals and objectives does this project support, and how?

The Core Purpose of the CDE is to lead and support the continuous improvement of student achievement, with a specific focus on closing achievement gaps for all students. The following three CDE goals support this core purpose:

- Building local capacity to enable all students to achieve state standards.
- Expanding and improving a system of recruiting, developing, and supporting teachers that instills excellence in every classroom, preschool through adult.
- Providing statewide leadership that promotes effective use of technology to improve teaching and learning.

4.4. What are the expected business outcomes or benefits of the proposal as they relate to your organization's business goals and objectives?

The expected benefits of the proposed IT project will be responsive to the following goals of the CDE Special Education Division:

- The unique needs for specially designed instruction will be accurately identified for all students with disabilities.
- All students with disabilities will be served or taught by fully qualified personnel.
- All students with disabilities will be successfully integrated with non-disabled peers throughout their educational experience.
- All students with disabilities will meet high standards for academic and non-academic skills.
- All students with disabilities will successfully participate in preparation for the workplace and living independently.

4.5. The following are from the State's IT strategic plan. Check the appropriate box(es) to identify the goals this proposal supports:

- Supporting and enhancing services for Californians and businesses
- Enhancing information and IT security
- Reducing state operational costs (leveraging, consolidation, new technology, etc.)
- Improving the reliability and performance of IT infrastructure
- Enhancing human capital management
- Supporting state and agency priorities and business direction

4.6. Is the proposal consistent with your organization's Enterprise Architecture?

- Yes
- No

If no, please explain why the deviation from the organization's Enterprise Architecture is necessary.

The CDE does not have a documented Enterprise Architecture. However, the application being developed is consistent with CDE's technical standards.

4.7. Will the proposed system collect, store, transmit, or exchange confidential or sensitive information?

- Yes
- No

4.8. If this proposal is conceptually approved, what is the estimated date (mm/yyyy) the FSR will be submitted?

12/2008

4.9. What is the estimated project start date (mm/yyyy) if the FSR is approved?

07/2009 (or upon enactment of the FY 2009-2010 Budget Act)

4.10. What is the duration of the proposed project?

Two years.

4.11. Will the proposed project utilize the existing infrastructure?

- Yes
- No

If no, please explain.

4.12. Is the proposal related to another proposal or to an existing project?

- Yes
- No

If yes, describe the related proposal or project and how it is related:

4.13. Describe the consequences of not doing this proposed project at the planned timeframe:

This IT project will provide great benefit to educators who serve students with ASD, as well as many other students with disabilities. Under the federal No Child Left Behind (NCLB) law and the Individuals with Disabilities Education Act (IDEA) of 2004, California is required to increase student achievement among all student sub-groups, including students with disabilities. Failure to improve the educational outcomes for students with disabilities can lead to non-compliance with the adequate yearly progress requirements under NCLB. Non-compliance with NCLB will likely result in financial sanctions to the CDE and all LEAs who do not meet adequate yearly progress requirements.

4.14. Check the appropriate box(es) to identify the proposal's funding strategy:

- Augmentation needed
- Redirection of existing funds
- Other (describe):

4.15. What are the estimated cost and funding source(s) by fiscal year through implementation (information should be provided in the following format):

Fund Source	2009-10	2010-11	2011-12	2012-13	2013-14 and future	Total
General Fund						
Federal Fund	\$600,000	\$ 203,000	\$ 41,000	\$ 41,000	\$ 41,000	\$ 926,000
Special Fund*						
Total	\$600,000	\$ 203,000	\$ 41,000	\$ 41,000	\$ 41,000	\$ 926,000

* Note: Identify the fund source and if the department is the sole user of the fund.

Total One Time Costs are \$803,000.

On-going Costs are \$41,000 per year.

Enterprise Architecture

A.1. Does your organization have documented Enterprise Architecture principles, strategies, or standards to guide decisions on technology projects?

- Yes
- No

A.2. Indicate on Table A-1 below, the completion status of the component Reference Models of your formal Enterprise Architecture efforts. If available, please submit a copy of your Enterprise Architecture document.

There are many efforts currently working on EA components. They are not concerted or focused on one master EA effort.

Table A-1, Enterprise Architecture Completion Status

Component Reference Model	Status			
	Implemented	Implementation in Progress	Planned or Planning in Progress	Not Implemented and Not Planned
Business			X	
Service			X	
Technical			X	
Data			X	

A.3. Describe the governance structure your organization uses to review and approve the Enterprise Architecture and any subsequent changes.

The current governance structure is not formalized and operates consistently though on an ad hoc basis. EA and changes are based on business needs self-identification, consultation, and vetting within the Department and LEAs, and finally at the state level with consultation with OCIO. As program areas in the Department self-identify needs in their business processes, they contact technology services. Their needs are vetted by a cross section of business, data management, fiscal, security, IT programs, and proposed changes documented. Once reviewed by Executive staff as to impacts other architecture components, changes are prioritized for resources first at the Division, then Branch, and then Department level for funding and resources.

A.4. Does your organization have an Enterprise Architect? (if yes, provide their name, telephone number, and e-mail address below)

- Yes
- No

Name: _____

Classification: _____

Telephone Number: _____ E-Mail: _____

Information Security

B.1. How is your Information Security Officer involved in proposed project development efforts?

The CDE Information Security Office is actively involved in the proposed IT projects process by:

1. Attending all New Project Intake Meetings.
2. Reviewing for compliance with state and CDE policies, standards and procedures:
 - Feasibility Study Reports.
 - Special Project Reports.
 - Internal Feasibility Study Reports.
 - Internal Project Summary Packages.
 - Small Project Summaries.
 - Contract Proposal Documents.
 - Request for Proposals.
 - Memorandum of Understandings.
 - All hardware and software purchases that deviates from standardized desktop and mobile computing assets.
 - Requirements decomposition and verification on reportable projects.
 - Operational Recovery Plans.
 - System design/architecture documents pertaining to information security on reportable projects.
 - Other information technology and information security related documents used for planning and managing proposed projects.
3. Approving, where necessary, the above listed reporting documents.

B.2. What are your department's core business principles, policies and standards related to information integrity, confidentiality, and availability and the protection of information assets?

CDE has adopted an Information Security Policy and a Privacy Policy, incorporating information security and privacy into the business objectives of the Department. (See following policies.)

CDE also maintains standards to support the policies; such as: Information Security Standards, Access to Student Level Data Standards, Software Standards, Hardware Standards, Application Development Standards, and Web Development and Content Standards.

B.3. If data within your department is shared with external entities, does your department implement data exchange agreements with these entities?

- Yes** See following for a listing of policies and standards regarding information assets.
 No

If no, please explain.

- Not applicable**

B.4. How does your department ensure that software developers and programmers follow standards and best practices for Web, application, and system development?

The Application Development and Maintenance Offices' (ADMO) management reviews and approves the purchase of all application development software to ensure that standard departmental development tools are being used by the appropriate personnel. For TSD

Information Security

developed applications, ADMO development methodology ensures that all applications adhere to CDE's technology standards and use application development best practices.

For web products, the CDE Information Security Office participates independently in the Web Application Review Team (WebART) review process when necessary to ensure appropriate measures are implemented to maintain the integrity, confidentiality, and protection of CDE's information assets. The WebART group is responsible for ensuring CDE standards are met and best practices are used in all web development.
(<http://www.cde.ca.gov/re/di/ws/webartproc.asp>)

B.5. Does your organization have an Information Security Officer? (if yes, provide their name, telephone number, and e-mail address below)

- Yes
- No

Name: Mary Harter

Classification: Senior Information Systems Analyst, Specialist

Telephone Number: 916-445-4544 **E-Mail:** mharter@cde.ca.gov

Workforce Development, Workforce Planning and Succession Planning

C.1. Does your organization have a workforce development plan for IT staff?

- Yes
- No

If yes, briefly describe it.

Currently the CDE does not have an official and documented IT Workforce Development Plan for IT Supervisors and Managers.

C.2. Check the appropriate box(es) to identify which workforce development tools, if any, your organization is using for IT classifications:

- Training
- Upward Mobility
- Mentoring
- Career Assessments
- Knowledge transfer program
- Performance Evaluations
- Other (please list)

C.3. Does your organization have a workforce plan for IT staff (i.e., for Rank and File)?

- Yes
- No

If yes, briefly describe it.

Currently the CDE does not have an official and documented IT Workforce Plan for Rank and File staff.

C.4. Does your organization have a succession plan for IT staff (i.e., for Management)?

- Yes
- No

If yes, briefly describe it.

Currently the CDE does not have an official and documented IT Succession plan for supervisors and managers.

C.5. IT Staffing

Provide the following information in table C-1 on the following page:

- The name of each IT classification currently in the organization.
- The number of staff in each IT classification in the organization.
- The number of staff in each IT classification eligible to retire in the next five years.
- The percentage of each IT classification eligible to retire in the next five years.

Table C-1 – IT Staffing

IT Rank and File Staff Classification	Number of IT Rank and File Staff in Classification	Number of IT Rank and File Staff in Classification Eligible to Retire in Next 5 Years*	IT Management Staff Classification	Number of IT Management Staff in Classification	Number of IT Management Staff in Classification Eligible to Retire in Next 5 Years*
Assistant Information Systems Analyst	4	2	Data Processing Manager III	3	1
Associate Information Systems Analyst (Specialist)	23	9	Senior Information Systems Analyst Supervisor	1	1
Associate Programmer Analyst (Specialist)	11	4	Staff Information Systems Analyst Supervisor	1	0
Senior Information Systems Analyst (Specialist)	7	3			
Senior Programmer Analyst (Specialist)	5	2			
Staff Information Systems Analyst (Specialist)	21	5			
Staff Programmer Analyst (Specialist)	11	6			

*Assumes age 55 as average retirement age

Project Management, Portfolio Management and IT Governance

D.1. Does your organization have a process for improving the alignment of business and technology?

- Yes
 No

If yes, briefly describe it.

The CDE TSD is constantly works with management on developing relationships and looks for ways to support education programs with technology. We utilize a number of processes to promote the discussion of needs.

- The Project Management Office regularly schedules program staff and management meetings to identify IT needs. These intakes allow TSD management, Data Management Division (DMD), Information Security and Budgets to bridge the gap between the program's business needs with information technology whenever appropriate.
- The DMD facilitates the CDE- California School Information Services (CSIS) Program Change and Issue management policies and process currently cover all of the CDE and CSIS issues and changes related to data collections under transition through CSIS, all state assessments impacted by changes, and all collection of data associated with SSID system, and SSID maintenance, individual student records, and /or teacher records.
- The Budget Office works with program staff and TSD during the regular budget cycle to help identify programmatic IT needs for their proposed projects.
- TSD constantly reaches out to work with programs to make sure they get what they need in commodity procurement and contracting for services. This allows IT contracting professionals to provide training for technology specialists throughout the Department.
- With the new requirements for strategic planning in the IT Capital Plan, this provides another venue to engage program areas both shorter and longer term.
- TSD continues to market its services using forums such as the intranet, new employee orientation, product training as well as procurement training to provide value added services. Additionally, TSD utilizes technology migration and updates/grades to solicit program feedback on services provided.

D.2. What is the status of implementing a formal portfolio management methodology for technology projects within your organization?

- Implemented (Please describe)
 Implementation in progress (Please describe)
 Planned or planning in progress
 Not implemented and not planned

The CDE has been working to meet currently required policies and standards, and has not begun to plan for implement a formal portfolio management methodology. The TSD PMO tracks some project information from the point of project intake to the completion of the FSR. There is some limited follow-up on small internal projects. Project information is captured in a PM database developed in MS Access. This information is limited and is used exclusively by the PMO to track basic project data.

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D.3. List any automated tools being used for portfolio management. Enter "None" if no automated tools are being used.

Internally developed application: *Project Information Management Reporting System.*

D.4. What is the status of implementing a standard project management methodology for technology projects in your organization?

Implemented (Please describe)

Implementation in progress (Please describe)

Project Life-Cycle development has been a goal of the IT Project Management Office. Unfortunately, as is often is the case, project and management support has delayed the development and implementation. The PMO in FY07/08 began to work on the most pressing processes facing projects at the moment: Configuration Management; Risk Management and draft standards and tools were initiated.

Additionally, a number of software products were purchased to support project development and support. These include MS Project 2007, for standardization of scheduling tools; IBM Rational RequisitePro for requirements management, including traceability matrices; American Systems Corporation's Enterprise Risk Radar to assist PMs to identify, analyze, track and plan risk responses, and to monitor and control the project teams participation in risk management; and, Numara Footprints which will be implemented to assist with change management from the requirements gathering to maintenance and operations phases. Currently, the PMO reviews all project plans and determine and facilitate the course of action going forward.

Planned or planning in progress

Not implemented and not planned

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D.5. Does the organization require its project managers to be certified, either through a professional organization (e.g., PMI, ITIL) and/or through completion of specified project management coursework:

- Yes
- PMI
 - ITIL
 - Agency-specified project management coursework (identify below)
- No

For reportable projects, CDE currently hires contract PMs to bring their expertise and experience to the Department. All PM contractors are required to maintain a current Project Management Institute certification.

In addition, the PMO currently has two state staff with Project Management Institute (PMI) certification to assist PMs on internal projects with execution of project management processes.

D.6. Select from the list other areas of training your organization requires of its project managers:

- Fundamental Project Management
- Systems Development Life Cycle
- Scheduling tool (identify below)
-
-
-
- Project Performance Management (e.g., Earned Value Management)
- Business Process Analysis
- Requirements Traceability
- Procurement/Contracts Management
- Other (identify below)
-
-
-
- None

CDE does not pay for contractors to attend training. It is the expectation that the PMs invest in their development with regular training and development paid for with their salary.

D.7. Describe project-level governance practices, including change management, issue resolution, and problem escalation.

The major goal of CDE's change management strategy is to ensure changes are made using standardized methods and procedures that minimize negative impacts and maximize positive impacts to the requirements, design, development, implementation, and maintenance of the system. The CDE project staff work perform standardized risk, issue, and change management as defined in best practice and industry standards such as PMI and Information Technology Infrastructure Library (ITIL). CDE project staff develops risk and change management plans in which severity advances from issues to risks to problems, and drives possible changes to the project. Management of these inter-related processes requires specific roles and responsibilities

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be identified, assigned, and performed continuously. Resolution is a joint effort headed up by project staff, program and technology, program, then proceeding to project steering committees and CDE executive management, and then on to State and Federal entities. The stakeholders bring their experience, knowledge, and resources to each project. CDE uses these processes, and escalation teams to:

- Minimize negative project risk.
- Provide documentation for all changes.
- Minimize disruption to the project due to rework.
- Measure project volatility.
- Provide open disclosure of changes.
- Communicate changes to stakeholders.
- Maximize system/application value.
- Minimize unanticipated impacts to schedule and/or budget.

These processes allow decision-makers the opportunity to evaluate risks and changes in a systematic and transparent manner—evaluating, prioritizing, and implementing where necessary appropriate mitigation strategies and changes. These processes and procedures are performed jointly by the project management team during all phases of the project from initiation through testing, implementation, and maintenance.

D.8. Does the project management methodology include processes for documenting lessons-learned and applying these to future projects?

Yes (Please describe)

The project management methodology being developed requires that the project depending on the size conduct a “lessons learned” process at the end of each phase change. The lessons learned will then be placed in the project management documentation library. Upon commencement of other projects, the Project Managers are required to review the lesson’s learned from previous projects. Additionally, PM and technical management deliverables are archived for reference from previous documents building on the previous projects success.

No

Acronyms List

Term	Definition
ADMO	Application Development and Maintenance Office
API	Academic Performance Index
ASD	Autism Spectrum Disorder
BCP	Budget Change Proposal
BOE	Brokers of Expertise
CACC	California Comprehensive Center
CaCISA	California Continuous Improvement for Student Achievement
CAIS	California Accountability Improvement System
CALPADS	California Longitudinal Pupil Achievement Data System
CALTIDES	California Longitudinal Teacher Integrated Data Education System
CCSESA	California County Superintendents Educational Services Association
CDE	California Department of Education
CNIPS	Child Nutrition and Information Payment System
COE	County Office of Education
CPM	Categorical Program Monitoring
CSIS	California School Information Services
CST	California Standard Tests
DMD	Data Management Division
EA	Enterprise Architecture
FAIS	Financial Accountability and Information Services
FSR	Feasibility Study Report
FY	Fiscal Year
GAAP	Generally Accepted Accounting Principles
GASB	Governmental Accounting Standards Board
IDEA	Individuals with Disabilities Education Act
IPOC	Independent Project Oversight Consultant
ISO	Information Security Officer
ITIL	Information Technology Infrastructure Library
ITPP	Information Technology Procurement Plan
LEA	Local Educational Agency
MS	Microsoft

Acronyms List

Term	Definition
NCLB	No Child Left Behind
PARI\$	Provider Accounting and Reporting Information System
PC	Personal Computer
PM	Project Manager
PMI	Project Management Institute
PMO	Project Management Office
RFP	Request for Proposal
SACS	Standardized Account Code Structure
SACS SRP	SACS System Replacement Project
SB	Senate Bill
SEA	State Education Agency
SDLC	System Development Life Cycle
SSID	Statewide Student Identifier
STAR	Standardized Testing and Reporting
TDS	Teacher Data System
TSD	Technology Services Division
VB	Visual Basic
WebART	Web Application Review Team