

**KERN COUNTY SUPERINTENDENT OF SCHOOLS
REVISED/APPROVED NOVEMBER 2003
TECHNICAL/SPECIALIST SERVICES SERIES
RANGE: 60.0
CLASSIFIED EXEMPT
CODE: 2,6,8**

**CSIS DATABASE SPECIALIST
(California School Information Services)**

DEFINITION

Under general supervision, plan and execute tasks supporting the development and operation of database and data warehouse structures and systems supporting the California School Information Services (CSIS) program staff, local education agencies and the California Department of Education.

As a senior technical staff member, the CSIS Database Specialist (DBS) may lead technical and procedural efforts that establish, document and carry out detailed services to CSIS Program participants.

Usual duties of the CSIS DBS include architecture and building of advanced data storage and retrieval systems, capturing and maintaining metadata, implementing operational diagnostics, monitoring system efficiency and ensuring the data integrity of CSIS data, ensuring systems and data backup plus providing training and technical support to other members of the CSIS staff.

The CSIS DBS is responsible to the CSIS Information Systems Administrator, and is expected to assist the CSIS Chief Operations Officer and other Program managers in strategic planning and operational strategies based on appraisals of system effectiveness as well as available and emerging data technologies.

EXAMPLES OF DUTIES

Systems analysis for database needs, and design of both logical and physical data structures providing Entity Relationship Diagrams (ERDs) and Data Flow Diagrams (DFDs);

database creation, development and maintenance including use of Data Definition Language (DDL);

development and support of database update and retrieval modules based upon Structured Query Language (SQL);

establish standards for, implement and monitor measures of operational efficiency effectiveness of database and data warehouse structures;

implement and maintain procedures for the efficient and effective deployment and use of data access, retrieval and storage routines including use of Remote Procedure Calls (RPCs);

perform data maintenance activities including data storage, archiving, and backup; and data receipts from and transfers to other entitled agencies;

provide and perform necessary systems management functions including adding and deleting accounts for users, groups;

enact security measures guarding against accidental or intentional misuse of data, monitor for and provide preemptive measures against unauthorized use;

coordinate and participate in training of CSIS Program staff and staffs of other agencies as directed;

create and maintain both production and test data environments;

provide timely and accurate reporting of CSIS data structures issues to the CSIS Information Systems Administrator, and as directed to key stakeholders and other entities;

reports to include observations of operational effectiveness and any needs for computer routines change or general program improvement;

establish and maintain effective relationships with providers of DBMS products and design tool sets and with the technical representatives of key CSIS stakeholders;

document, report and follow-up with software and hardware vendors regarding problems with and enhancements of or modification to their products;

serve as a cooperative and contributing member of the CSIS Program Office team;

complete other duties as assigned.

QUALIFICATIONS

Knowledge of:

Thorough knowledge of one or more relational or multidimensional database management systems, such as Oracle, SQL Server, Informix or Sybase, plus demonstrated knowledge of microcomputer database tools such as *Access*, *FoxPro*, *4th Dimension* or similar product;

capabilities, capacities and limitations of databases and or computer hardware and software systems;

advanced principles, practices and computer systems development methodologies; and client support issues and concepts.

Ability to:

Proven ability to effectively work on concurrent tasks and with multiple entities;

work with formal organizational structures as well as with flexible teams;

build and manage constructive inter-personal relationships;

excellent written and verbal communication skills.

Experience:

A minimum of five years combined experience in designing for, development of, implementing and using relational or multidimensional database management systems (DBMS) is necessary.

A minimum of two years experience using advanced CASE or other data and systems design tools (examples are *Erwin*, *Oracle Designer*, and *Popkin System Architect*) is preferred.

Experience with high-end servers and mini or mainframe with large-scale implementations is preferred.

Experience in Unix environment is a plus.

Experience using microcomputer platforms is acceptable.

Demonstrable progress in job assignments for this period is expected.

Desirable experience includes:

Five or more years experience in large scale, enterprise database and data warehouse applications;

Five or more years experience in client-server and/or server based applications;

Two or more years working with school and/or student based information systems;

Two or more years working in local area and wide area network (LAN/WAN) environments;

Two or more years of computer programming experience.

Education:

Requires graduation from an accredited four-year college or university with a major in computer science, information technologies, or a related field.

Work experience resulting in an equivalent knowledge base may be substituted for the major requirement.

Condition of employment:

Must maintain proof of privately owned automobile insurance and possess a valid California Motor Vehicle operator's license.

Fingerprint clearance by both the Federal Bureau of Investigation and the California Department of Justice is a condition of appointment after all other required job conditions have been met.

This position is overtime exempt and has a probationary period of one year.

ST:rjw

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