## DATABASE ADMINISTRATOR

### **DEFINITION**

Plan, maintain, and develop databases, as well as develop applications and solutions using SQL, .NET, VBS, and other appropriate programming languages and frameworks. Integrate both the Student Information and Financial systems with external and internal databases and applications. Develop and maintain protocols and procedures that will ensure the integrity of District data residing in said databases. Document and maintain business rules and authority sources.

# **Distinguishing Characteristics:**

The Database Administrator (DBA) is primarily responsible for supporting, developing, and maintaining database systems. The DBA is the only position in the District who is uniquely qualified to perform database-related activities or functions to include:

- Codify and schedule database jobs and backups/restoration
- Establish database system security
- Provide Information Services level project management support for business process solutions development
- Provide development and consultative support for business process improvement solutions
- Establish standards for matters related to systems development and database systems support/development/maintenance

### SUPERVISION RECEIVED AND EXERCISED

Receives direction from the Database Application Supervisor.

<u>EXAMPLES OF DUTIES</u> – (Incumbents may perform any combination of the essential functions shown below (E). This position description is not intended to be an exhaustive list of all duties, knowledge or abilities associated with this classification but is intended to accurately reflect the principle job elements.)

Planning, Development, Implementation, and Project Management:

Assist with programming and development of business and operational applications. (E)

Work with project teams to develop and implement project management plans. (E)

Plan data flows for a new or revised databases. (E)

Test new systems. (E)

Establish and maintain coding standards and best practices. (E)

Data Security, Integrity, Backup, and Recovery:

Ensure data remains consistent across databases. (E)

Develop plans and procedures to assure that data remains consistent across all databases. (E)

Ensure that storage, archiving, backup, and recovery procedures are functioning correctly. (E)

Develop procedures for data security, backup, and recovery. (E)

Regularly and routinely, audit data for accuracy and logic. (E)

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Communicate regularly with technical, applications, and operational staff, to ensure the integrity and security of all data. (E)

Develop systematic mechanisms to help ensure the integrity of all data. (E)

Accurately assess users' access requirements and resolve access problems. (E)

Assure that users may access secured data based upon job duties and responsibilities using SAS (Statistical Analysis Systems) applications. (E)

Documentation, Standards, Protocols, and Procedures:

Assure that business rules governing data are clearly defined and routinely monitored. (E)

Ensure extract, transfer, and load procedures and protocols are established and maintained. (E)

Maintain data standards, including adherence to the Children's Internet Protection Act (CIPA). (E)

Write database documentation; prepare and document data standards, procedures, and definitions for the data dictionary. (E)

Control access permissions and privileges; assure adherence to Family Educational Rights to Privacy Act (FERPA). (E)

Leadership/Advisory:

Provide leadership and guidance to Technology department staff. (E)

Serve as a resource and active participant for general technology projects. (E)

Participate in trainings and meetings as directed. (E)

Evaluate and recommend technical solutions. (E)

Train and provide guidance to other DBAs and applications analysts as needed. (E)

Perform related duties as assigned.

### **QUALIFICATIONS:**

## Knowledge of:

- Legal responsibilities and restrictions of FERPA and CIPA as they apply to access control and privileges for security.
- Conceptual design processes.
- Documentation standards, including procedures and definitions for metadata.
- Database design and management of databases and corresponding systems.
- Standard programming languages for SQL, .NET, WEB, and desktop platforms to include, but not limited to, T-SQL, C##, JavaScript, HTML5, PERL, PHP, VBScript
- Development practices, to include software maintenance and version control.
- Database systems and architectures
- Database system performance monitoring and analysis

## Ability To:

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- Plan and implement a project management plan.
- Serve as a technical liaison/resource to assist and train District personnel on application usage.
- Provide reports to the Information Services (IS) Department as needed.
- Utilize resources such as technical reference manuals, hardware specifications, and troubleshooting guides to identify solutions.
- Engage external resources to solve problems.
- Maintain current knowledge of technological advances in the field.
- Meet multiple deadlines and timelines.
- Plan and organize work.
- Communicate effectively, both orally and in writing.
- Establish and maintain effective working relationships with others.
- Maintain consistent, punctual, and regular attendance.
- Maintain focus under occasional periodic barrage of interruptions
- Give direction and exercise tact, diplomacy, empathy, and firmness in highly emotional situations.
- Personal Qualities:
- Independent worker
- Maturity and good judgment
- Neat and clean appearance
- Willingness to assume a wide range of responsibilities
- Willingness to learn new skills
- Willingness to continuously improve
- Pleasant interpersonal skills
- Good organizational skills
- Commitment to professional responsibility
- High intrinsic motivation
- Positive "can do" attitude
- Ability to travel to a variety of locations within a reasonable time frame.
- Must be able to operate office, multimedia, and computer equipment.

# **Education and Experience:**

Bachelor's degree in computer science, business administration, management information systems or related field required. At least five (5) years of responsible experience in database administration planning, design, configuration, installation, troubleshooting, integration, performance monitoring, maintenance, enhancement, and security management. Experience in K-12 school district environments is highly desired.

## License and Certificate:

- Possession of a valid California Motor Vehicle Operator's License
- Current Industry related Database Certifications is highly desired.
- Valid First Aid and CPR certificates must be obtained within sixty (60) days from date of hire

# **WORKING CONDITIONS:**

# **Environment:**

Primarily indoor work environment

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- Occasional dark/dusty confined spaces
- Constant interruptions

## Physical Demands:

Employees in this position must have/be able to:

- Stand or sit for extended periods of time.
- Frequently reach, grasp, stoop, bend, push, pull, kneel, squat, and twist to store or retrieve materials.
- Frequently lift or move up to 15 pounds to waist height, up to 250 ft.
- Occasionally lift or move up to 40 pounds to waist height, up to 250 ft., with assistance.
- Dexterity of hand and fingers to operate a computer keyboard.
- Vision sufficient to read small print and computer screens, with or without vision aids.
- Speak clearly and distinctly, sufficient to make oral presentations and to converse by telephone.
- Hearing sufficient to use a telephone and to hear discussions and questions during meetings or conferences, with or without hearing aids.
- Ability to climb stairs.

## **HAZARDS**:

• Working with equipment that may potentially cause electrical shock.