## TITLE: DATABASE ADMINISTRATOR PROGRAMMER

**JOB GOAL:** Under the direction of the Director of Student Data Services, performs specific database administration and programming functions as necessary for the establishment, management, maintenance, modification and administration of the District's student information databases as well as other District database/programs; analyze, develop and maintain District technology programs and applications instrumental to the operational functions of the District.

### **QUALIFICATIONS:**

# Knowledge of

- 1. Legal responsibilities and restrictions of Ed Code, FERPA and CIPA as they apply to access control and privileges for security of student data;
- 2. Standard programming languages for SQL, .NET, WEB, and desktop platforms to include, but not limited to, T-SQL, C##, JavaScript, HTML5, PERL, PHP, VBScript;
- 3. Relational database design techniques, capabilities, operation, and control including SQL database administration and T-SQL programming.
- 4. Modern application processes including workflow, database integration, data validation and role-based security.
- 5. Familiarity with K-12 curriculum, instructional strategies, and the relationship of technology and instructional technology applications of these areas;
- 6. Principles of student information system and web design;

# Ability to

- 1. Explain complex technical issues to non-technical staff.
- 2. Develop solutions to complex technical database management system problems.
- Analyze, troubleshoot and maintain all District student information system databases.
- 4. Serve as a technical liaison/resource to develop and provide training for District personnel on application usage.
- 5. Engage external resources to solve problems.
- 6. Maintain current knowledge of technological advances in the field.
- 7. Manage multiple projects with varying timelines simultaneously.
- 8. Plan and prioritize workload to complete projects, processes and reports on schedule.
- 9. Establish and maintain effective working relationships with those contacted in the performance of assigned duties.
- 10. Coordinate with multiple internal and external stakeholders.
- 11. Work independently with minimal supervision.
- 12. Work in a team environment.

# Training and Experience

- 1. Bachelor Degree in Computer Science, Information Systems or Business, including coursework in programming which includes, but not excluded to MSSQL,.NET, ASP, Python and Java is desired, or equivalent experience.
- 2. Three (3) years of comprehensive professional experience related to school business data administration desired.
- 3. Three (3) years of project management experience is desired.

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**REPORTS TO:** Assistant Superintendent or designee

### **ESSENTIAL FUNCTIONS:**

1. Manages, installs, and maintains the operation and performance of database hardware and software solutions, including Student Information Systems, to ensure that it operates in a manner consistent with the needs of the District.

- 2. Analyzes and evaluates database systems, and makes recommendations to ensure their integration with other systems used in the District;
- 3. Perform routine systems administration tasks such as installing new hardware and software, maintaining user accounts, database administration, and scheduling backups;
- 4. Perform systems level programming as necessary, to ensure that Student Information Systems and servers operate in a manner consistent with the needs of the District;
- 5. Provide ongoing support to District and school personnel in the resolution of Student Information System(s) issues;
- 6. Document the District's database environment;
- 7. Develop SSIS packages, stored procedures and scripts to integrate data among various systems used in the District;
- 8. Maintain database performance by calculating optimum values for database parameters, implements new releases and completes maintenance requirements;
- 9. Provide ongoing support for databases that support instructional resources and systems to ensure the efficient running of the databases and connections to the student information system;
- 10. Coordinate with multiple departments in the development and submission of various local, state and federal reports;
- 11. Design, develop and maintain dashboards, scorecards, analytics and visualizations allowing for interactive functionality using BI development environments.
- 12. Analyze, design, develop and maintain data models in new and legacy Data Warehouses (DWH) using various data sources from district-wide student systems, human resource and finance backend databases:
- 13. Design, develop and maintain Extract, Transform, and Load (ETL) queries primarily coded in SQL to populate the DWH from multiple databases and other disparate data sources;
- 14. Design, implement and document customization of District student information system;
- 15. Assist with vendor contracted programming services;
- 16. Preserve information system assets and data integrity by implementing disaster recovery and backup procedures, information security and control structures and cross platform data accuracy solutions;
- 17. Quickly identify database problems, evaluate causes and take correction action for resolution:
- 18. Provide user support for District applications;
- 19. Perform other duties as assigned.

### **PHYSICAL ABILITIES**

- 1. Visual ability to read handwritten or typed documents and the display screen of various office equipment and machines.
- 2. Able to conduct verbal conversation in English or other designated language.
- 3. Able to hear normal range verbal conversation (approximately 60 decibels.)
- 4. Able to sit, stand, stoop, kneel, bend, and walk.

# PHYSICAL ABILITIES (continues)

- 5. Able to sit for sustained periods of time.
- 6. Able to climb slopes, stairs, steps, ramps, and ladders.
- 7. Able to lift up to ten (10) pounds frequently, and thirty (30) pounds occasionally.
- 8. Able to carry up to ten (10) pounds frequently, and thirty (30) pounds occasionally.
- 9. Able to push and pull objects weighing up to thirty (30) pounds.
- 10. Able to exhibit full range of motion for shoulder external rotation and internal rotation, shoulder abduction and adduction, elbow flexion and extension, shoulder extension and flexion, back lateral flexion, hip flexion and extension, and knee flexion.
- 11. Able to demonstrate manual dexterity necessary to operate calculator, typewriter, and/or computer keyboard at the required speed and accuracy in a safe and effective manner.
- 12. Able to operate a motor vehicle in a safe and effective manner.

### **SPECIAL REQUIREMENTS**

1. Possession and maintenance of a valid and appropriate California Driver's License; have an acceptable driving record; and be insurable at standard rates by the district's insurance carrier and maintain such insurability during the course of employment.

**TERMS OF EMPLOYMENT:** 245-day duty days

Twelve-month work year

Management

**EVALUATION:** Performance of this job will be evaluated in accordance with Board of Education policy on Evaluation of Professional Personnel by the Assistant Superintendent or designee.

Approved by: Board of Education Date: May 10, 2018

MURRIETA VALLEY UNIFIED SCHOOL DISTRICT IS A TOBACCO-FREE, DRUG-FREE WORKPLACE and AN EQUAL OPPORTUNITY EMPLOYER