

# For the future of every student

## CLASS TITLE: DATABASE/NETWORK ANALYST

#### **BASIC FUNCTION:**

Under the direction of the Director-Technology Services, perform a variety of specialized duties involved in the installation, configuration, operation, development, maintenance and repair of the Student Information System (SIS), District networks, and related equipment, hardware, software, databases and applications; provide technical support, training and assistance to SIS and network system users; administer, evaluate and modify network and database systems to assure proper operation and meet the data processing needs of the District.

#### **REPRESENTATIVE DUTIES:**

#### **ESSENTIAL DUTIES:**

Perform a variety of specialized duties involved in the installation, configuration, operation, development, maintenance and repair of the SIS, District networks, and related equipment, hardware, software, databases and applications; monitor and evaluate network and system performance to assure proper functioning; identify problems, concerns and security issues.

Inspect, troubleshoot and diagnose network and SIS hardware, software, database, server and application malfunctions to assure smooth running of computer systems; resolve network and system problems and malfunctions; monitor and maintain SIS and network system security; run anti-virus programs as needed; implement anti-virus solutions and security patches.

Provide technical assistance and training to District personnel, administrators and others concerning computer systems, networks and databases; respond to inquiries and provide detailed and technical information concerning related operations, equipment, hardware, software, security, configuration, malfunctions, applications, practices, techniques and procedures.

Install server, SIS and computer system software; test applications to assure proper operation; configure hardware and software to assure network access and smooth system operations; install software and application upgrades, patches and updates as needed.

Assist and provide support to SIS users with various computerized tasks related scheduling, grading, transcripts, food services, attendance and various other school district functions; receive and respond to telephone calls and e-mails from system users; provide general troubleshooting, determine type of request and provide solutions.

Perform a variety of specialized duties in the operation, development, modification, maintenance and analysis of the SIS and related databases to meet District needs; monitor database performance to assure smooth operations; make necessary alterations and assure proper functioning and integrity of data, systems and databases.

Install, configure and assure smooth and efficient operation of network hardware, cabling, wiring hubs, routers, switches, racks, wireless access points, and other network components; repair and replace hardware as needed; install, configure, administer and maintain network system servers; maintain and update firewalls.

Design, develop and implement new databases and applications; respond to requests concerning system

additions, enhancements and revisions; create, configure, maintain and develop databases, applications and computer functions such as records, reports, queries, tables, forms, schedules, calendars and files.

Perform a variety of network and system administration activities including establishing and maintaining passwords, permissions, internet connectivity, firewalls and designated programs and systems; configure access rules and VPN settings.

Provide for the effective and efficient backup, storage, retrieval, customization and archiving of computerized data; troubleshoot and resolve database problems; maintain and assure data integrity; facilitate the collection, management, manipulation, reporting and distribution of computerized data used for analysis; modify databases to enhance system performance and presentation of data.

Assist in the planning, design, installation, configuration and modification of LAN's, WAN's, MAN's and other network systems; estimate equipment, material, hardware, hardware, time and cost requirements for network projects.

Participate in the planning, development and implementation of SIS and network system projects; estimate equipment, material, hardware, hardware, time and cost requirements for network projects; develop and maintain network documentation such as maps, plans and specifications.

Monitor, control and assure proper network usage, security, traffic, access, operations, resources allocation, bandwidth, internet use and connectivity; configure, install and maintain internet filter hardware and firmware updates and patches; maintain filtering profiles; establish, maintain and distribute filter override accounts.

Communicate with personnel and various outside agencies to exchange information and resolve issues or concerns.

Operate a variety of computers, servers, peripherals and specialized software; utilize various hand and power tools; drive a vehicle to conduct work.

Compile information and prepare and maintain various records and reports related to networks, accounts, problems, SIS enhancement requests, permissions, status and assigned activities; maintain firewall support agreement as directed.

Utilize various computer systems to input, import, scan and update data; establish and maintain automated records and files; create queries, extract information, develop forms, provide links to data and generate various computerized reports and documents; delete data and records as needed.

Schedule, monitor and maintain daily system back-ups; prepare backup data files in accordance with established procedures as required develop, perform data recovery procedures as needed.

#### OTHER DUTIES:

Perform related duties as assigned.

#### **KNOWLEDGE AND ABILITIES:**

#### KNOWLEDGE OF:

Practices, procedures and techniques involved in the installation, configuration, operation, development, maintenance and repair of computer systems, networks, and related equipment, hardware, software, databases and applications.

Principles, methods and procedures of operating computers, networks and peripheral equipment.

Computer database systems, software applications and networking standards utilized by the District. System utilities and design and program applications.

Materials, methods and tools used in the operation, installation and repair of databases and networks.

Computerized data collection, management, manipulation and distribution requirements for analysis and reporting functions.

Principles, practices, procedures and equipment involved in network administration.

Database structures, on-line applications and system capabilities of the District's computer systems.

LAN and WAN usage, implementation and network terminology.

Applicable types of cabling systems, servers, hubs, routers, switches and other related equipment.

Interpersonal skills using tact, patience and courtesy.

Oral and written communication skills.

Record-keeping and report preparation techniques.

#### **ABILITY TO:**

Perform a variety of specialized duties involved in the installation, configuration, operation, development, maintenance and repair of the SIS, District networks, and related equipment, hardware, software, databases and applications.

Troubleshoot, diagnose and resolve problems and malfunctions with computers, networks, databases, hardware, software, servers and related peripherals.

Provide technical assistance, training and user support concerning computer systems and networks.

Install, update, upgrade and assure proper operation of server, SIS and computer system software.

Administer, evaluate and modify network systems to assure proper security and operation.

Facilitate the collection, management, manipulation, reporting and distribution of computerized data used for analysis.

Perform a variety of network and database administration activities.

Maintain network system security, servers and databases.

Provide for effective and efficient storage, retrieval, customization and archiving of data.

Install and configure network hardware, cabling, routers, switches and related equipment.

Modify existing programs to improve reporting and record maintenance.

Meet schedules and time lines.

Work independently with little direction.

Maintain various records related to work performed.

Communicate effectively both orally and in writing.

Establish and maintain cooperative and effective working relationships with others.

Maintain regular and consistent attendance.

# **EDUCATION AND EXPERIENCE:**

Any combination equivalent to sufficient experience, training and/or education to demonstrate the knowledge and abilities listed above. Typically, this would be gained through: associate's degree with course work in computer science or related field and four years experience involving the operation, development, maintenance and repair of database and network systems and related equipment, hardware, software and applications.

### **LICENSES AND OTHER REQUIREMENTS:**

Valid California driver's license.

# **WORKING CONDITIONS:**

**ENVIRONMENT:** 

Indoor work environment.

Driving a vehicle to conduct work.

# PHYSICAL DEMANDS:

Dexterity of hands and fingers to operate a computer keyboard.

Hearing and speaking to exchange information.

Seeing to read a variety of materials and view a computer monitor.

Sitting or standing for extended periods of time.

Lifting, carrying, pushing or pulling moderately heavy objects as assigned by the position.

Bending at the waist, kneeling or crouching.

Reaching overhead, above the shoulders and horizontally.

Approved by Personnel Commission:

09/19/2007