JOB DESCRIPTION San Diego County Office of Education

Database Manager

Purpose Statement

The job of Database Manager is done for the purpose/s of overseeing the planning, architecture, development, design and maintenance of the Business Intelligence and database systems that support business and learning objectives; documenting system components and user instructions; and serving as a technical advisor to staff and other district personnel.

Essential Functions

- Collaborates with a variety of internal and external parties (e.g. users, vendors, development staff, district clients, database technicians, consoling administrators, etc.) for the purpose of determining needs for data structures and data management at the SDCOE and providing and/or receiving information for ensuring project success.
- Designs and oversees the implementation of business intelligence initiatives for decision making and to close the equity and access gap for San Diego County students (e.g. server configuration, security, disaster recovery and backups, structures, logical data model, scripts and stored procedures, etc.) for the purpose of providing end users with access to accurate data.
- Directs the design, development, and implementation of business intelligence projects for districts and internal clients for the purpose of facilitating the review and analysis of data for their decision makers.
- Evaluates and recommends new BI technologies (e.g. database hardware purchases, database software, business intelligence tools, license costs, etc.) for the purpose of supporting SDCOE mission and vision.
- Leads and develops a variety of Business Intelligence support processes and documentation (e.g. instructions, notices, reminders, memos, technical standards, training materials, license tools, database standards, libraries for best coding practices, hardening server guidelines, cyber security policies, KPI dashboards, etc.) for the purpose of maintaining design, functional and interdependency documentation of all existing Business Intelligence projects.
- Leads, directs, establishes vision and monitors all business intelligence activities and database (e.g. cataloging, file locking, access rights, license purchasing and maintenance, etc.) for the purpose of creating new database structures, managing existing databases and monitoring compliance with established policies and security procedures.
- Monitors BI activities and performance (e.g. Business Intelligence, machine learning and predictive analytics, etc.) for the purpose of ensuring that the industry best practices are implemented throughout SDCOE's infrastructure.
- Participates in meetings (e.g. intra and inter committees, professional organizations, workshops, trainings seminars, conferences, etc.) for the purpose of conveying and/or gathering information required to perform job functions.
- Performs personnel administrative functions (e.g. training, assigning, evaluating, supervising, coaching, etc.) for the purpose of enhancing efficiency productivity of personnel and ensuring project objectives are achieved.
- Researches new technologies (e.g. Business Intelligence, network security, etc.) for the purpose of recommending new systems for improving services for SDCOE and clients.

- Serves as a technical resource for business units, application services team, department and SDCOE staff in a variety of areas (e.g. industry trends, staff training, expertise needs, data retention requirements, data analysis techniques and results, etc.) for the purpose of ensuring proper and efficient use of systems, providing information and/or advice regarding active or planned projects.
- Supports the cyber security lead to identify, recommend and address information security policies, procedures and protocols for the purpose of implementing security training for all SDCOE staff, scanning vulnerability of all systems and maintaining the security of the SDCOE's data.
- Troubleshoots application software and malfunctions of database systems for the purpose of isolating bugs, resolving operational issues and restoring services.

Other Functions

• Performs other related duties as assigned for the purpose of ensuring the efficient and effective functioning of the work unit.

Job Requirements: Minimum Qualifications

Skills, Knowledge and Abilities

SKILLS are required to perform multiple, technical tasks with a need to periodically upgrade skills in order to meet changing job conditions. Specific skill based competencies required to satisfactorily perform the functions of the job include: planning and managing projects; preparing and maintaining accurate records; and utilizing pertinent software applications.; analyzing data; using pertinent software applications; operating standard office equipment; conducting meetings; and administering personnel policies and procedures.

KNOWLEDGE is required to perform advanced math; read technical information, compose a variety of documents, and/or facilitate group discussions; and analyze situations to define issues and draw conclusions. Specific knowledge based competencies required to satisfactorily perform the functions of the job include: relational and dimensional databases; BI methodologies; record structures, media input and output devices; enterprise-level applications; and current generation database methodology including object based design, operating systems, protocols, and programming languages.

ABILITY is required to schedule activities, meetings, and/or events; often gather, collate, and/or classify data; and consider a variety of factors when using equipment. Flexibility is required to work with others in a wide variety of circumstances; analyze data utilizing defined but different processes; and operate equipment using a variety of processes. Ability is also required to work with a diversity of individuals and/or groups; work with data of varied types and/or purposes; and utilize a variety of types of job-related equipment. Problem solving is required to analyze issues and create action plans. Problem solving with data frequently requires independent interpretation of guidelines; and problem solving with equipment is moderate to significant. Specific ability based competencies required to satisfactorily perform the functions of the job include: communicating with persons of varied technical knowledge and backgrounds; establishing and maintaining effective working relationships; working as part of a team; adapting to changing priorities; and applying logical processes and analytical skills; available on-call; working extended hours and regularly updating skills and knowledge to remain up to date with current technology trends.

Responsibility

Responsibilities include: working under limited supervision using standardized practices and/or methods; directing other persons within a small work unit; operating within a defined budget. Utilization of resources from other work units is often required to perform the job's functions. There is a continual opportunity to have some impact on the organization's services.

Working Environment

The usual and customary methods of performing the job's functions require the following physical demands: some lifting, carrying, pushing, and/or pulling, some stooping, kneeling, crouching, and/or crawling and significant fine finger dexterity. Generally the job requires 80% sitting, 10% walking, and 10% standing. This job is performed in a generally clean and healthy environment.

Experience Job related experience within a specialized field is required.

<u>Education</u> Bachelors degree in job-related area.

<u>Equivalency</u> Any combination equivalent to: a bachelor's degree in computer science or a related field and even years of progressively responsible database, data management and data design experience including: working with specialized data structures; success in database design techniques; success in application, database and data security, design and implementation; and success in a matrix organization.

| Required Testing | Certificates |
|---------------------------|-------------------|
| Continuing Educ./Training | <u>Clearances</u> |

FLSA State: Exempt

Salary Range: Classified Management, Grade 44

Personnel Commission Approved: October 19, 2016