

Sonoma County Office of Education – Job Description

Classified Management

DATA ANALYST

Definition:

Under the direction of the Director of Information Technology and/or Chief Technical Officer, plan, coordinate, manage and oversee multiple projects to design, develop, implement, maintain and enhance third party and in-house applications and related infrastructure. Provide technical support and training for data systems as needed. Act as Project Manager for the acquisition, development, testing, training and enhancement of existing and new business, student and data systems used by the County Office and Sonoma County districts; Act as liaison to third party vendors to identify customer requirements, consider available technologies and implement appropriate solutions.

Distinguishing Characteristics:

This is a management classification that requires a thorough understanding of the operations of systems from both the user's perspective and the developer's perspective related to financial/HR systems, student information systems, document management systems, data analysis tools and other application systems as assigned. This class provides expert and advisory guidance to county and district staff in the use of integrated systems and supports staff in maintaining the accuracy and reliability of the systems. In contrast, the Business Systems Support Analyst is responsible for user support of the financial system and the Information Systems Support Analyst is responsible for user support of California Longitudinal Pupil Achievement Data System (CALPADS) and student information systems (SIS).

Supervision Exercised and Received:

Employees in this class receive limited supervision within a broad framework of policies and procedures. The incumbent receives direction and training and supervision from the Director of Information Technology and/or Chief Technical Officer.

Example of Duties and Responsibilities:

Duties and Responsibilities may include, but are not limited to, the following:

- Act as Project Manager for the acquisition, development, documentation, testing, training and enhancement of new and existing data systems; attend planning meetings and interview users to gather information on needs and desired system features for re-engineering the system.
- Provide day to day technical systems support and training to users for financial and HR/payroll applications, student systems, document management systems and student performance data analysis tools.
- Analyze user concerns, requirements and requests for system features and uses; identify applications, modifications and enhancements and implement appropriate solutions.
- Implement and coordinate data management goals and objectives for the purpose of providing for the efficient and effective functioning of system policies and procedures.
- Oversee the design, implementation, maintenance, security and administration of database systems.

- Provide expert data analysis to answer critical questions that will help the users manage and understand the data and the trends; analyze and interpret data using statistical techniques.
- Perform a leadership role in the areas of advanced data techniques, including data access, data integration, data visualization, data discovery and statistical methods.
- Design, create and maintain data warehouses that aggregate multiple data sources (SIS, Assessments, HR, Financial) and create reports and dashboards to support district Local Control and Accountability Plans (LCAP) and early warning goals.
- Assist end-user with the creation of custom reports using a variety of software and database tools including standard query language (SQL).
- Perform testing of new and/or modified software applications by developing test data and calculating expected results; install required updates, coordinating any downtime with affected users.
- Act as an information resource to employees concerning computer and software applications; researches and resolves problems; incorporates repeated questions into training program.
- Act as liaison between software vendors and County Office.
- Attend workshops and seminars to remain current on computer applications; disseminates information to other employees and districts.
- Perform related duties as assigned.

Employment Standards:

Knowledge of:

- Policies, procedures, functions and principles to maintain complex database and reporting systems.
- Principles, practices and methods of database development, management and implementation and related system design.
- Industry standards and procedures of SIS database application and maintenance, student attendance, grading, registration and class scheduling standards, practices and procedures.
- Microsoft SQL Server, Transact-SQL (TSQL) query language, writing complex TSQL queries.
- Microsoft Office and other productivity applications for generating reports and documentation; practical experience using Extract, Transform and Load (ETL) tools such as Microsoft SQL Server Integration Services (SSIS), Visual Studio .NET and Microsoft Excel.
- Analytic skills with the ability to collect, organize, analyze and disseminate significant amounts of data with attention to detail and accuracy.
- Experience extracting and utilizing large data sets, adept at queries, report writing and presenting findings using infographics and other technology based tools.
- Knowledge of statistics and experience using statistical packages for analyzing small and large datasets.
- Ability and willingness to learn new software programs that assist in data analysis.
- Ability to deliver effective presentations to a range of stakeholders.
- Experience writing data protocols and facilitating professional development in the area of data analysis.
- Practical experience creating dashboards, scorecards, analytics and visualizations allowing for interactive functionality using Business Intelligence (BI) development environments such as MS Excel with Powerpivot, SQL Server Reporting Services (SSRS), PowerBI, Tableau, and/or Qlik.
- Troubleshooting and diagnostic techniques for identifying and resolving database and reporting errors.
- Standard English usage, spelling, grammar and punctuation.

- Interpersonal skills using tact, patience and courtesy.
- Safe work practices.
- Effective training techniques.

Ability to:

- Respond promptly to requests of internal and external clients; provide needed information, assistance, training, materials and resources.
- Plan, organize and prioritize own work to meet deadlines and accomplish assigned tasks within established timelines including maintaining accurate records and files.
- Plan, organize, direct, control and perform activities related to the development, documentation, testing, training and enhancement of new or existing computerized software systems.
- Maintain an orderly work environment and perform tasks in prescribed and safe manner.
- Establish and maintain cooperative working relationships with those contacted during performance of job duties.
- Maintain and improve professional skills and knowledge.
- Be flexible and receptive to change.
- Understand and apply principles, techniques and procedures required for effective job performance.
- Install and maintain complex database systems.
- Troubleshoot and debug database applications and software problems.
- Train and assist others in the use and functions of assigned software.
- Write effective database queries using SQL and other software tools.
- Test and evaluate software applications.
- Effectively implement problem-solving techniques.
- Prepare and deliver clear and concise oral and written instructions.
- Prepare complex technical written material in an effective and comprehensive manner.
- Communicate effectively both orally and in writing, including developing and executing oral presentations for small and large groups.
- Work in an independent manner with little direct supervision.

Education and Experience:

Any combination of education and experience that would provide the knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Any combination equivalent to: Bachelor's Degree from an accredited College or University with a concentration in Mathematics, Economics, Computer Science, Information Management and/or Business Administration; or equivalent experience in managing data systems and five years increasingly responsible experience in information systems in a large scale information technology environment. Strong knowledge and experience with data analytic and reporting tools: Tableau, Excel, MS SQL, Crystal Reports, Laserfiche and core business services such as Financial, Payroll and Human Resources. Ability to write and prepare elaborate proposals, contracts and scopes of work. Experience with educational administrative systems and in public education environment.

Physical Abilities:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.

- Visual acuity sufficient to read manuals, video display screens and other related material and work at a computer screen frequently and throughout the day.
- Occasionally standing, bending, stooping, and/or kneeling.
- Occasionally crawling in confined spaces in buildings.
- Lifting up to twenty-five (25) pounds frequently, fifty (50) pounds on an occasional basis and in excess of fifty (50) pounds with assistance. The heavy objects to be lifted include personal computers, printers and related equipment.
- Hear normal conversation.
- Speak clearly.
- Drive an automobile and transport equipment and documents.
- Sit for long periods in a typing position.

Work environment:

- Work is performed in an office environment with minimal exposure to health and safety considerations.

Other Requirements:

- Must be fingerprinted and a satisfactory Department of Justice records check must be received by Sonoma County Office of Education, prior to employment.
- TB testing will be required upon employment.
- Must pass a pre-employment physical (if applicable).
- May be required to obtain first aid and CPR certificates within the first 6-12 months of employment.
- May be required to drive with or without students; some positions may require a current California driver license, proof of insurance and possible participation in the DMV Pull Notice Program once employed.

Other:

- Adopted: January 28, 2019
- FLSA Status: Exempt
- Bargaining Unit: Unrepresented
- Approved by: Personnel Commission