

SAN MATEO COUNTY OFFICE OF EDUCATION

CLASS TITLE: SENIOR INFORMATION TECHNOLOGY ANALYST

BASIC FUNCTION:

Under the direction of the Manager, Information Technology Support, lead and participate in a variety of technical activities involved in the programming, development, modification and analysis of computer systems, databases, software and applications to meet the needs of County Office and client school district technology users, resolve data problems and provide for system enhancements; design, code, test and implement new system applications; train and provide work direction and guidance to assigned personnel.

REPRESENTATIVE DUTIES:

ESSENTIAL DUTIES:

Lead and participate in a variety of technical activities involved in the programming, development, modification and analysis of computer systems, databases, software and applications to meet technology user needs, resolve data problems and provide for system enhancements.

Train and provide work direction and guidance to assigned personnel; assign employee duties and review work for accuracy, completeness and compliance with established standards, requirements and procedures.

Monitor, analyze and adjust programming activities in response to user needs; participate in the development and implementation of computer programming projects, goals and objectives; review completed projects to assure alignment with project and technology goals and objectives.

Analyze requests for application additions, solutions and revisions; confer with users to determine system and application needs, requirements, feasibility, operational problems and desired output; develop systems and applications in response to user feedback.

Facilitate the collection, management, manipulation, reporting and distribution of computerized data used for analysis; verify integrity of data in new systems.

Administer assigned databases to assure proper performance, operation and file sizing; monitor available system space; move and reformat files as necessary to provide for efficient program and system running; analyze and design interface between computer systems as needed.

Review, analyze and modify existing systems and programs as necessary; prioritize and respond to requests concerning existing computer systems and programs; evaluate computer system performance and utilization; modify programs and systems to enhance operations.

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Design, code, write, develop and implement new system applications; revise programs as necessary to assure adaptation with existing computer systems; design, install, upgrade and configure software applications to enhance and assure smooth running of assigned computer systems.

Debug programs by preparing test data and testing program operations as assigned; run test data in actual computer operations; detect and resolve programming errors and miscalculations; troubleshoot and resolve database, system and application errors and malfunctions as necessary.

Evaluate existing system designs to determine effectiveness and operational efficiency; modify systems to enhance system performance and presentation of data; integrate new software and revise programs as necessary to assure adaptation with existing computer systems.

Review and analyze computerized records and reports to assure accuracy and detect processing errors; modify systems and applications to resolve errors as needed; determine appropriate error corrections for software and correct existing data as necessary

Provide technical support to County Office staff and technology users; respond to inquiries and provide training and information concerning the proper use and operation of computer systems and programs; assist staff with resolving system problems and provide data processing solutions.

Prepare and maintain a variety of records and reports related to computer programs, files, layouts, enhancement requests, errors and assigned activities; utilize assigned computer systems to initiate queries and generate computerized reports as requested.

Prepare and develop technical design specifications, program descriptions, procedural manuals and user documentation according to established procedures; evaluate new technologies for effectiveness in meeting the business requirements and objectives of technology users.

Communicate with technology users and various outside agencies to exchange information, coordinate activities and resolve issues or concerns.

Operate a variety of computers, servers, peripherals and specialized software.

Attend and participate in various meetings and in-services as assigned.

OTHER DUTIES:

Perform related duties as assigned.

KNOWLEDGE AND ABILITIES:

KNOWLEDGE OF:

Principles, practices and techniques used in the development, maintenance and analysis of computer systems, databases and applications.

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Computer programming systems, utilities and applications used by the County Office.

Applicable programming languages.

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

System utilities and design and program applications.

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

Principles, practices and methods of database structures, computer programming and system design.

Principles of training and providing work direction.

Database structures, on-line applications and system capabilities of County Office computer systems.

Techniques of testing and debugging computer programs.

Record-keeping and system documentation techniques.

Interpersonal skills using tact, patience and courtesy.

Oral and written communication skills.

ABILITY TO:

Lead and participate in a variety of technical activities involved in the programming, development, modification and analysis of computer systems, databases, software and applications to meet technology user needs, resolve data problems and provide for system enhancements.

Train and provide work direction and guidance to assigned personnel.

Review, analyze and modify existing systems and programs as necessary.

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

Develop and implement programming projects, goals and objectives to meet County Office needs.

Design programming solutions for application problems and malfunctions.

Integrate new applications and revise programs to assure adaptation with existing computer systems.

Maintain assigned databases to assure proper performance, operation and file-sizing.

Analyze requests for system additions and revisions.

Operate computers and peripheral equipment properly and efficiently.

Meet schedules and time lines.

Communicate effectively both orally and in writing.

Establish and maintain cooperative and effective working relationships with others.

Maintain various records related to work performed.

Analyze situations accurately and adopt an effective course of action.

EDUCATION AND EXPERIENCE:

Any combination equivalent to: bachelor's degree in computer science or related field and three years increasingly responsible experience involving the programming and development of computer systems, databases and applications.

WORKING CONDITIONS:

ENVIRONMENT:

Office environment.

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 for extended periods of time.