



RESEARCH ANALYST, SENIOR/DATA WAREHOUSE COORDINATOR

SALARY GRADE: [C1-70](#)

DEFINITION:

Under the direction of the Executive Director of Institutional Research and Planning, the position is responsible for organizing, designing, and assisting in the coordination and implementation of a comprehensive institutional research program especially providing support for its data management and quality assurance programs. The position provides leadership for designing, implementing, and maintaining a comprehensive analytical data warehouse, data quality assurance programs, decision support system(s), and the institutional research and planning web site. The position supports the development and maintenance of strategic district and college planning processes; uses and analyzes data and conducts research to support decision-making, budgeting, assessments and evaluations, and enrollment management and to support the district and colleges in maximizing educational effectiveness and program performance.

EXAMPLE OF DUTIES AND RESPONSIBILITIES:

In collaboration with appropriate Institutional Research and Planning and Information Systems staff and depending upon assignment, duties may include, but are not limited to, the following:

1. Conducts, documents, writes, and presents research on such topics as student retention, cohort tracking, student learning and institutional outcomes, placement and outcomes assessment, matriculation, program evaluation, enrollment, staffing, impact studies, Weekly Student Contact Hours (WSCH) data, student success, and student outcomes.
2. Provides leadership for the design, development, and maintenance of a comprehensive institutional research data warehouse for research, decision-making, evaluation, assessment, reporting, and planning purposes.
3. Develops, uses, and maintains query tools and templates for accessing data in the warehouse and other databases; assesses needs for access and query templates; and provides consultation and training in query tool, template, and data warehouse use.
4. Develops, maintains, and publishes data policies, procedures, and standards for the data warehouse, data elements, and extract procedures.
5. Develops and implements quality assurance policies, procedures, and practices for ensuring the accuracy of all district data and reports related to the production databases, the analytical data warehouse, other databases, and the institutional research and planning web site.
6. Designs, develops, and maintains additional institutional research databases as needed to improve the efficiency and effectiveness of institutional research and decentralized research and analysis for improving student learning and institutional performance.
7. Provides leadership for and technical expertise to coordinate the development and maintenance a comprehensive, attractive, user-friendly, institutional research and planning web site including a comprehensive online statistical fact book and online access to research and planning reports and documents.
8. Assists in developing college and district planning processes and participates in the development of district, college, and program plans, especially by providing relevant data, research, and analysis.
9. Prepares and presents complex oral and written reports to faculty, administration and others on data access and use, information, analyses and research findings.

10. Performs descriptive and inferential statistical calculations and analyses using client-server, statistical and spreadsheet software.
11. Responds to external reporting requirements and requests, including Federal and State reporting, surveys, National Center for Education Statistics (NCES) reports, and Westat reports.
12. Assists with the design, implementation, and analysis of survey research, including survey instruments and questionnaires.
13. Collects, maintains, documents, indexes, and updates reports and reference materials used by institutional research, especially those related to the online Fact Book and web-site.
14. Stays current on findings and trends in institutional research and planning, especially as related to data management, data warehousing, decision support systems, and institutional research web site use and support.
15. Participates in local, regional, and state activities to promote institutional research and planning and for professional development.
16. Attends a variety of meetings as assigned.
17. Serves on college and district committees on data management and information systems, enrollment management, outcomes assessment, student equity and diversity, and other topics.
18. Assists in the preparation of grant applications and reporting to funding organizations.
19. Performs other related duties as assigned.

EMPLOYMENT STANDARDS:

Knowledge of:

1. Institutional research, its literature, organizations, and practices or ability to acquire knowledge thereof.
2. Research design, methods, sampling, statistics, and analytical strategies and techniques typically used in institutional research.
3. Data warehouse and decision-support system design and use for institutional research purposes or ability to acquire knowledge thereof.
4. Database query tool use, especially Brio.
5. Quality assurance techniques, procedures, and policies or ability to acquire knowledge thereof.
6. Data reduction and display techniques.
7. California community college data element structures or ability to acquire knowledge thereof.
8. Operation of a computer, server, and operating systems and relevant software.
9. Statistical software packages and tools such as SAS and SPSS, spreadsheet software, relational database software operation and management.
10. Issues in higher education; program evaluation and assessment of educational outcomes or ability to acquire knowledge thereof.
11. Oral and written communication skills, including public speaking techniques.

Ability to:

1. Demonstrate understanding of, sensitivity to, and respect for the diverse academic, socio-economic, ethnic, religious, and cultural backgrounds, disability, and sexual orientation of community college students, faculty and staff.
2. Design and conduct institutional research projects and studies including research design, methods, statistical analysis, qualitative research methods, and analytical techniques.
3. Lead in the development and maintenance of complex database systems, a data warehouse, and a decision-support system for institutional research purposes.
4. Design and develop query templates for user-friendly access to the data warehouse and other complex databases.

5. Gather, validate and interpret data from a wide variety of sources including literature and Internet searches.
6. Develop quality assurance policies, procedures, and practices to ensure the validity and reliability of district and institutional research data.
7. Design, post, and manage complex web pages for institutional research purposes and web site.
8. Perform appropriate statistical analyses and interpret results and findings.
9. Report and communicate complex ideas and research findings clearly and concisely.
10. Create, evaluate, document, and maintain research files, records and complex data and information systems for collecting and manipulating large quantities of data from sources including surveys and complex databases.
11. Establish and maintain cooperative and effective working relationships with others.
12. Manage projects, problem solve, facilitate group meetings, and coordinate projects.
13. Meet schedules and time lines.
14. Learn new ideas, procedures, processes, and computer software.

Education and Experience

Any combination equivalent to:

1. Bachelor's degree in a research-related field (statistics, mathematics, economics, social sciences, or education).
2. Three (3) years of professional- level experience in a similar setting.

Preferred Qualifications:

1. Master's degree.

WORKING CONDITIONS:

Environment:

1. Office environment.

Physical Abilities:

1. Hearing and speaking to exchange information in person and on the telephone.
2. Dexterity of hands and fingers to operate computer keyboard and audio, video, and computer equipment.
3. Seeing to read various materials.
4. Standing for extended periods of time.
5. Reaching overhead, above the shoulders and horizontally.
6. Bending at the waist, kneeling or crouching.
7. Lifting, carrying, pushing or pulling heavy objects up to 30 lbs.

Date Approved: March 15, 2002

EEO Code: H-30