

# San Jose · Evergreen Community College District Classified Job Description

Position: Data Warehouse Research Analyst Department: Institutional Effectiveness

**Location:** District Office **Date:** June 14, 2023

#### **POSITION PURPOSE**

Under the direction of an assigned administrator, the Data Warehouse Research Analyst is responsible for organizing, designing and assisting in the coordination and implementation of a comprehensive institutional research program with the emphasis of providing support for its data management and quality assurance programs. The Data Warehouse Research Analyst leads and creates comprehensive sets of data reports to be used by district staff for self-service or customized reporting; supports the development and maintenance of the data warehouse and strategic district planning process; and conducts complex data warehouse queries, analysis and research to support decision-making, budgeting, enrollment management and program reviews. This position works as a lead in planning, implementation and maintenance of comprehensive data warehouse/data quality assurance programs, as well as vendor management and user support.

## **KEY DUTIES AND RESPONSIBILITIES:**

- 1. Work as Subject Matter Expert in the design, development and maintenance of a comprehensive institutional research data warehouse for research, decision-making, assessment, reporting and planning purposes.
- 2. Serve in a lead role in data warehouse planning: work with users to gather requirements, apply data regulations as determined by governmental/agency data definitions and requirements, collaborate with data stewards and other data sources to validate data elements and performance, and coordinate with ITSS, stakeholders, users, and vendors to maintain quality data warehouse.
- 3. Develop, maintain, and publish data protocols, procedures, standards and definitions for data warehouse elements; facilitate review and definition of student data warehouse functional areas, business and data process, flow of data between systems.
- 4. Develop and implement quality assurance protocols, procedures and practices for ensuring the accuracy of all district data and reports related to the test and production databases; provide user-friendly data glossaries, data definition and user support/training.
- 5. Support efforts to ensure accuracy and integrity of data and systems; monitor data for compliance with deferral and state regulations and district policies; develop data standards and systems documentation to guide users on proper use and maintenance of data.
- 6. Use a wide variety of research analysis methodologies and technologies to develop institutional research studies and reports on topics such as student success, cohort tracking, enrollment management, staffing, impact studies etc.
- 7. Develop and maintain a comprehensive institutional Fact Book and other web-based data warehouse reports.
- 8. Design, prepare and disseminate a variety of statistical reports and survey data and present to a wide variety of audiences both internal and external.
- 9. Develop, use, and maintain query tools and templates for accessing data in data warehouse and other databases; assess needs for access and query templates.

- 10. Provide technical support, assistance and training to staff, faculty, administrators and others in research methodologies, data analysis, and state/federal reporting requirements.
- 11. Assist in developing institutional and programmatic planning processes by providing relevant data, research and analysis.
- 12. Respond to inquiries and requests for information including federal and state reporting, grant application, surveys, etc.
- 13. Serve on college and district committees on data management and information systems, enrollment outcomes assessments, student equity and diversity and others.
- 14. Stay current on new trends and innovations in institutional research and planning and data analysis; implements policy and procedural changes as required.
- 15. Perform other related duties to the classification as assigned.

## **EMPLOYMENT STANDARDS**

# Knowledge of:

- 1. Research design, methods, sampling, statistics, and analytical strategies and techniques typically used in institutional research.
- 2. Project management and data warehouse principles and reporting tools.
- 3. Current management information systems software including database, spreadsheet, graphic display, and data visualization tools.
- 4. Advanced formula and macro usage in spreadsheets and databases.
- 5. Database query tool use, data reduction and display techniques.
- 6. California community college data element structures.
- 7. Principles and techniques of information display and presentation in an environment with diverse audience

# Skills and Ability to:

- 1. Lead in the development and maintenance of complex database systems and a decision-support system for institutional research purposes
- 2. Develop quality assurance protocols, procedures and practices to ensure the validity and reliability of district data.
- 3. Design and conduct institutional research projects and studies including research design, methods, statistical analysis, qualitative research methods, and analytical techniques.
- 4. Set up databases for projects with a view to the data's relationship to the total project goals and outputs.
- 5. Read, analyze and interpret statistical reports, professional journals, technical procedures or governmental regulations.
- 6. Write reports, business correspondence and procedures manuals.

- 7. Gather, validate and interpret data from a wide variety of sources including literature and Internet searches.
- 8. Perform appropriate statistical analyses and interpret results and findings.
- 9. Communicate effectively both orally and in writing.
- 10. Establish and maintain cooperative and effective working relationships with others.
- 11. Work independently with little supervision; prioritize work and meet schedules.

## **Experience and Education:**

- 1. Bachelor's degree in a research-related field including but not limited to statistics, mathematics, economics, data science, computer science or related field.
- 2. Three years of directly related research work experience.
- 3. Work experience as a lead with evidence of increasing responsibility over the work of others.
- 4. Demonstrated sensitivity, knowledge and understanding of the diverse academic, socioeconomic, gender identity, sexual orientation, cultural, disability, and ethnic backgrounds of groups historically underrepresented, and groups who may have experienced discrimination
- 5. Success integrating diversity as appropriate into the major duties outlined in the job description and in the duties listed in the District's hiring policy; or demonstrated equivalent transferable skills to do so.

### **WORKING CONDITIONS**

# **Environment:**

1. Typical office environment.

# **Physical Demands:**

- 1. Dexterity of hands and fingers to operate a computer keyboard.
- 2. Sitting or standing for extended periods of time.
- 3. Hearing and speaking to exchange information in person or on the telephone.
- 4. Seeing to read a variety of materials.

Board Approved: 6/13/2023

Salary Range: 130

EEO Category: 2B2 - Other Professionals

Job Description: Data Warehouse Research Analyst Page 3