ELK GROVE UNIFIED SCHOOL DISTRICT

CLASS TITLE: SENIOR RESEARCH ANALYST

BASIC FUNCTION:

Under the direction of the Director – Research and Evaluation or designee, plan, coordinate, design, conduct or oversee research and evaluation activities; provide training and information to site and District personnel to facilitate informed decision-making regarding use of data for the improvement of district programs and school site delivery of instruction and other services provided to students; plan, coordinate and conduct activities related to assigned State and District assessment and testing programs.

DISTINGUISHING CHARACTERISTICS:

The Senior Research Analyst operates more independently with responsibility for the design and implementation of assigned research projects while assisting with the leadership and coordination of Research and Evaluation staff. The Research Analyst II serves as a technical resource for district leadership and site staff and leads research projects with considerable independence. The Research Analyst I develops and implements programs and research methodology under direction, working closely with supervisory and lead personnel.

ESSENTIAL FUNCTIONS:

Conceptualize, design, and implement methodologies to conduct large and small-scale quantitative research and evaluation studies; design measures of implementation, design data collection and survey instruments, manage data collection, develop quality control protocols for data processing and manipulations, perform complex statistical analyses, interpret findings, and make recommendations.

Independently query, merge, clean, manipulate, and analyze data from large relational databases; accurately produce and interpret findings; develop summary reports for various audiences, and for state, federal, or grant reporting purposes.

Collaborate with Technology Services personnel to design new database tables and measures.

Coordinate the work of research and evaluation contractors and provide status reports to management regarding timelines and progress.

Identify opportunities for new research and evaluation opportunities based on trends and district needs. Assist Research Project Managers and Director in contributing to the long-term research strategies to ensure alignment with organizational goals.

Assist in the training of less-experienced strategists, analysts, and technicians.

Conduct training or informational seminars on research, reports, or data systems to inform decision making.

Conduct training classes for system users on new or changed procedures.

Advise other personnel on evaluation methods, measurement design, and product design to

improve accuracy, clarity, and usability.

Design and implement quality control procedures to ensure the accuracy, validity, and aesthetic integrity of colleagues' work products.

Lead discussions on the interpretation and presentation of findings to a variety of audiences including school personnel, parents, District administrators, and the Board of Education.

Assist in the coordination of the daily functions of Research and Evaluation Team to set appropriate priorities and goals to maximize productivity.

Provide technical assistance and consultation services to District and site administrators regarding design and implementation of research and evaluation projects including overall project conceptualization, logic modeling, program implementation measures, survey/forms design, sample selection, data collection and analysis, hypothesis testing, reporting and interpretation of results, presentation methods and graphics, and use of data to inform instructional practices and decision making.

Catalogue and index research data using appropriate classification systems and keywords for easy retrieval and accessibility.

Develop and implement data management plans, including data storage, security, backup, and preservation strategies.

Create and maintain detailed metadata descriptions for research data to facilitate discoverability, understanding, and reuse.

Provide technical assistance and consultation services to District and school administrators on the development of logic models and use of input, output, and outcome data including resources, program implementation, and various student outcome measures.

Communicate with staff in other District departments/divisions and from outside organizations to facilitate and coordinate grant requirements and research activities.

Respond to requests for research or evaluation services from other District departments/divisions and school site administrators.

Maintain knowledge of national, regional, and local educational data sources; maintain an awareness of the major professional educational journals and current research; maintain an awareness of State - level governmental agencies producing and disseminating educational data; serve as a liaison with the major local and State - wide data providers.

Formulate policies and procedures relevant to program areas based on information of a conceptual nature from varied and complex sources.

Proactively track and monitor developing or potential legislative changes, obtain input from district staff to submit comments on education code changes, develop recommendations for creation or adjustments of District board policies, administrative regulations, and district procedures, as needed.

Operate a variety of office equipment including a computer and specialized software including statistical packages, charts and graphics, word processing, spreadsheets, and desktop publishing.

Perform related duties as assigned.

DEMONSTRATED KNOWLEDGE AND ABILITIES:

KNOWLEDGE OF:

SAS, R, STATA, or other programming for data manipulation and social science research. Science of statistics, including statistical theory, techniques, and methods encompassing such areas as sampling ratios and proportions, measures of dispersion and central tendency, reliability, validity, correlations, time series, trends, index numbers, and forecasting. Significance of various statistical measures.

Methods of statistical applications.

Theory and practice related to program evaluation, educational measurement, and student learning.

Methodology used in educational research design and statistical analysis.

Research and evaluation, data collection, processing, analysis, and reporting.

Statistical and mathematical computations and measurements.

Computer software applications relevant to social science research and assessment development.

Database systems and data management.

Computer capabilities and data processing applications.

Educational testing principles and practices.

Tenets of professional development, professional learning, and adult education.

Principles of data visualization and business intelligence software.

Planning, organization, and direction of student assessment activities.

Survey design.

Oral and written communication skills.

Operation of a computer and assigned software including desktop publishing, charts and graphics, word processing and spreadsheets.

Public speaking techniques.

Interpersonal skills using tact, patience, and courtesy.

Applicable laws, codes, regulations, policies, and procedures.

ABILITY TO:

Translate complex technical, statistical, legislative, and legal language and ideas into understandable and appropriate communications and presentations for a variety of audiences.

Plan, coordinate, design, and conduct activities related to research and evaluation.

Accurately analyze and interpret assessment, research, and evaluation results and provide clear and concise narrative and graphic explanations of data and trends.

Prepare and perform a variety of oral presentations.

Serve as a trainer and technical resource for data analysis and reporting results.

Plan and analyze work to utilize the capabilities of available equipment and software.

Make accurate mathematical and statistical computations.

Maintain current knowledge of trends and advances in the field.

Communicate effectively both orally and in writing.

Prepare comprehensive narrative and statistical reports.

Monitor, interpret, apply, and explain rules, regulations, policies, and procedures.

Analyze situations accurately and adopt an effective course of action.

Establish and maintain cooperative and effective working relationships with others.

Meet schedules and timelines.

Work independently with little direction.

Complete assignments successfully with minimal direction and supervision.

Plan and organize work.

Maintain consistent, punctual, and regular attendance.

Effectively communicate to exchange and understand information and create presentations.

Operate a computer and assigned office equipment.

Effectively operate a computer keyboard.

Effectively read and analyze a variety of materials.

Sit or stand for extended periods of time.

EDUCATION AND EXPERIENCE REQUIRED:

Bachelor's degree required in Data Science, Statistics, Education Policy, Sociology, or related field, plus three (3) years experience in data analysis, educational research, or related field; or Master's degree in Data Science, Statistics, Education Policy, Sociology, or related field, plus one (1) year experience in data analysis, educational research, or related field; or Doctorate degree in Data Science, Statistics, Education Policy, Sociology, or related field.

WORKING CONDITIONS:

ENVIRONMENT:

Office environment.

BOARD APPROVED: March 19, 2024