

GUILFORD COUNTY SCHOOLS JOB DESCRIPTION

JOB TITLE: DATA ANALYST ACCOUNTABILITY AND RESEARCH DIVISION

GENERAL STATEMENT OF JOB

Under general supervision, provides technical support to the Accountability and Research Division in the areas of data management and statistical analysis. Employee is responsible for assisting with data collection from all kinds of resources, statistical analysis, and reporting; responding to data requests and questions from the central office staff and school staff; and assisting the division on the all kinds of projects. Work also involves using a variety of software packages, and assisting colleagues in the division to learn to use these programs for specific projects. Employee must have strong organizational and interpersonal skills, and must ensure that data reports are accurate and conform to all ethical guidelines. Employee reports to the appropriate supervisor.

SPECIFIC DUTIES AND RESPONSIBILITIES

ESSENTIAL JOB FUNCTIONS

Assists in designing various data collection projects and activities.

Develops timelines for project implementation, including resources needed.

Collaborates in selecting appropriate data collection instruments or in designing instruments

Collects data from all kinds of resources including related web sites, obtains needed data from existing data files, and creates/prepares appropriate spreadsheets and databases.

Assists the Accountability and Research Division in the development of survey instruments.

Completes analyses and written summaries of data from formative and summative assessment/testing as well as evaluation projects.

Determines overall quality of data and trouble shoots and corrects problems with data (e.g., inaccurate or missing data).

Uses common software packages to develop reports and results bulletins on testing and evaluation projects.

Prepares charts and graphs to illustrate data trends. Prepares PowerPoint presentations as needed.

Fulfills data requests and answers questions for schools and other appropriate audiences.

Provides technical assistance to schools regarding testing and evaluation results as well as school improvement.

DATA ANALYST

Provides consultation to others in the division, on a formal or informal basis, on the use of software packages, as requested.

Conducts literature reviews about educational practices as needed, generally through computerized methods.

Collects data from individual school sites, consolidates and creates summary databases/reports.

Troubleshoots operational and software problems in the Assessment and Evaluation Department, determines causes of error or stoppage, applies corrective techniques in cases where the problem is software related or refers problem to technical support staff.

ADDITIONAL JOB FUNCTIONS

Performs other related work as required by the Chief Accountability and Research Officer.

MINIMUM TRAINING AND EXPERIENCE

Bachelor's degree in computer science, psychology, education or related field, and one to three years of experience in educational measurement; or any equivalent combination of training and experience which provides the required skills, knowledge, and abilities. Must have the background and aptitude to become proficient with various software packages such as WORD, EXCEL, SPSS/SAS, and North Carolina Department of Public Instruction scoring software.

MINIMUM QUALIFICATIONS OR STANDARDS REQUIRED TO PERFORM ESSENTIAL JOB FUNCTIONS

Physical Requirements: Must be physically able to operate a variety of equipment including computers, scanners, copiers, calculators, etc. Must be physically able to operate a motor vehicle. Must be able to exert up to 40 pounds of force occasionally, and/or a negligible amount of force constantly to lift, carry, push, and pull or otherwise move objects, including the human body. Light Work usually requires walking or standing to a significant degree.

Data Conception: Requires the ability to compare and/or judge the readily observable, functional, structural or composite characteristics (whether similar or divergent from obvious standards) of data, people or things.

Interpersonal Communication: Requires the ability to speak and/or signal people to convey or exchange information. Includes receiving instructions, assignments or directions from superiors.

Language Ability: Requires the ability to read a variety of correspondence, reports, forms, articles, proposals, manuals, legislation, graphs, charts, etc. Requires the ability to prepare correspondence, reports, forms, charts, graphs, statistical analysis, etc., using prescribed formats and conforming to all rules of punctuation, grammar, diction, and style. Requires the ability to speak to people with poise, voice control and confidence.

DATA ANALYST

Intelligence: Requires the ability to apply principles of logical or scientific thinking to define problems, collect data, establish facts, and draw valid conclusions; to interpret an extensive variety of technical instructions in mathematical or diagrammatic form; and to deal with several abstract and concrete variables.

Verbal Aptitude: Requires the ability to record and deliver information, to explain procedures, to follow oral and written instructions. Must be able to communicate effectively and efficiently in a variety of technical and professional languages including psychometric, statistical and educational research terminology.

Numerical Aptitude: Requires the ability to utilize mathematical formulas; to add and subtract; multiply and divide; utilize decimals and percentages; and to apply the theories of algebra, descriptive statistics, statistical inference and statistical theory.

Form/Spatial Aptitude: Requires the ability to inspect items for proper length, width and shape.

Motor Coordination: Requires the ability to coordinate hands and eyes rapidly and accurately in using office equipment.

Manual Dexterity: Requires the ability to handle a variety of items such as office equipment. Must have minimal levels of eye/hand/foot coordination.

Color Discrimination: Requires the ability to differentiate between colors and shades of color.

Interpersonal Temperament: Requires the ability to deal with people beyond giving and receiving instructions. Must be adaptable to performing under stress and when confronted with persons acting under stress.

Physical Communication: Requires the ability to talk and hear: (Talking: expressing or exchanging ideas by means of spoken words. Hearing: perceiving nature of sounds by ear.) Must be able to communicate via telephone.

KNOWLEDGE, SKILLS AND ABILITIES

Thorough knowledge of educational research methodology, including research design, program evaluation and data analysis.

Thorough knowledge of program guidelines and professional standards.

Considerable knowledge of the current legislature, literature, trends, methods and developments in the area of test result evaluation.

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Considerable knowledge of the ethical guidelines applicable to the position as outlined by professional organizations and/or federal, state and local laws, rules and regulations.

Considerable skill in evaluating standardized test results and other data.

Considerable knowledge of the North Carolina Standard Course of Study.

General knowledge of the principles of organization and administration.

General knowledge of statistical and graphical software available.

Skill in designing data collection instruments such as surveys.

Skill in developing research designs, data storage strategies, program evaluation techniques and data analysis methods.

Skill in training and supporting school administration and staff.

Ability to maintain complete and accurate records and to develop meaningful reports, charts and graphs from them.

Ability to use common office machines and popular computer-driven word processing, spreadsheet and file maintenance programs.

Ability to effectively express ideas orally and in writing.

Ability to establish and maintain effective working relationships as necessitated by work assignments.

DISCLAIMER

The preceding job description has been designed to indicate the general nature and level of work performed by employees within this classification. It is not designed to contain or be interpreted as a comprehensive inventory of all duties, responsibilities, and qualifications required of employees to this job.