



SYSTEM PLANNING AND PERFORMANCE DATA ANALYST I, II, III

BASIC FUNCTION

Under general direction, conduct complex small-to-large scale data, statistical and mathematical analysis and query or database program optimization, including query development and data validation, to provide meaningful data and information for use in a variety of district programs and reports; create queries, validate and audit data and use moderate to advanced statistical techniques and programs to synthesize, transform, combine and manipulate multifaceted and complex data sets from multiple sources into reports or other representations; provide training and assistance in support of assessment requirements, data collection and interpretation, reporting and analysis.

REPRESENTATIVE DUTIES:

The classification specification does not describe all duties performed by all incumbents within the class. This summary provides examples of typical tasks performed in this classification.

- Responsible for all aspects of assigned small-to-large scale data analysis and reporting, including query and report design, programming and development, gathering and combining data from multiple sources and data manipulations and validation; extract, review, analyze, validate and maintain data sets and queries to compute statistical operations, disaggregate data and identify trends, patterns and abnormalities within data sets; respond to requests for a variety of ad-hoc data requests, queries and reports and conduct and monitor projects including those involving the data warehouse. “E”
- Organize and optimize data into user friendly formats, such as tabular, graphical or narrative representations, for clarity and use in analysis, evaluation and presentations; use web tools to create data reporting interfaces; develop customized reports, infographics and other data manipulations and assure reports meet standardized criteria, federal, state or other set requirements. “E”
- Develop and implement procedures, priorities and timelines for data cleanup to assure data is available to meet reporting timelines and other annual reporting processes and requirements; maintain and distribute reoccurring reports, ensure that reports meet requirements and are submitted in timely manner to remain in compliance with District, local, state, Federal and other reporting agencies. “E”
- Oversee the compilation, input, and/or loading of data from multiple sources, such as district testing programs, school sites, District offices and outside agencies and the optimization of these processes; provide detailed analysis of data collection structures and systems such as enrollment procedures, student attendance categories, transcripts and program components. “E”
- Review, validate, audit, correct, update, and analyze student information including demographics, attendance, grades, assessment requirements and results, discipline and similar information in district data warehouse and other databases and maintain separate databases as necessary for use in, or preparation of, a variety of specialized district, federal and state required reports. “E”
- Assure compliance with laws related to data collection, test security, student confidentiality and ensure student data is maintained and reported in accordance with local, state and Federal laws, codes, policies, guidelines; assist with, develop and revise processes, procedures, standards and guidelines related to data collection, queries, schools' student information databases and district integration of information. “E”
- Work with stakeholders to create new, or modify existing reports for program evaluations, grant applications, public information requests and other related needs; provide status updates and findings throughout projects, analysis or reporting cycle to key stakeholders. “E”

- Review and analyze system files and field functionality to determine the integrity of data; assess how files and included fields, tables and values can best be used by district users to serve students' and district's needs; develop new data related tools and reports to support effective data utilization; recommend and implement system enhancements and data solutions such as data warehousing, validation, access, security and integrity of student information; assist with system testing and the implementation of patches, system updates, form revisions, and software upgrades. *“E”*
- Utilizing best practices, participate in the creation, automation and standardization of queries and reports; prepare and present recommendations and implement solutions for the elimination, consolidation or addition of reports, or reporting standards that support the reduction of manual report generation or distribution. *“E”*
- Collaborate with colleagues and serve on cross-functional district teams to solve problems and improve data analysis, querying and reporting techniques; participate in, coordinate, plan, implement and maintain databases such as the district data warehouse and computerized student information systems. *“E”*
- Provide support, participate in, develop and present materials, trainings and other professional development opportunities to a wide variety of audiences including teachers, principals, district leadership and community stakeholders on a variety of data literacy topics including, data analysis, interpretation of assessment data or other data reports, reporting requirements, dashboard access and overall system use. *“E”*
- Keep current on research design, and statistical methodologies in education, psychology and social sciences; attend and participate in meetings, conferences, and seminars relevant to new developments in assessment, reporting requirements, compliance, data collection, analysis and distribution; lead, attend and participate in a variety of meetings, in-service trainings, workshops, conferences and seminars relevant to data analysis and reporting. *“E”*
- Demonstrate a commitment to the Portland Public Schools Equity Initiative by developing a thorough knowledge and application of the district Racial Educational Equity Policy, Equity in Public Purchasing and Contracting and other board policies; participate in staff development, in-services and trainings related to diversity, equity and inclusion in the workplace and in K – 12 education; model appropriate behaviors; develop, recommend and implement improvements to educational and business practices with awareness and understanding of their impact in a racially and culturally diverse community. *“E”*
- May serve on District’s Institutional Review Board (IRB) to review and evaluate research proposals from internal staff and/or external researchers.
- May serve in a lead capacity and provide work direction and guidance to designated staff.
- Perform related duties as assigned.

Note: At the end of some of the duty statements there is an italicized “E”, which identifies essential duties required of the classification. This is strictly for use in compliance with the Americans with Disabilities Act.

DISTINGUISHING CHARACTERISTICS OF THE CLASS

All classifications in this series are responsible for the analysis and reporting of data and assuring that data entered into District Information Systems is accurate and complete. All levels within this series collect and review site-generated data, create, run and validate a variety of reports, conduct statistical correlations and disaggregate data, for internal use and external reporting; all levels contribute to and participate in the development and delivery of user training. The levels are differentiated by the scope of work performed, the levels of complexity in developing and generating data sets, leadership over processes and staff and input into cross-functional teams and activities related to system support and functionality.

This classification series differs from other analyst classifications in that the System Planning and Performance Analysts gather and combine data from multiple sources and work with multiple databases as well as “big data”. Data analysis processes performed by this series require working knowledge of and expertise in both computer programming and complex mathematical and/or statistical analysis.

The System Planning and Performance Analyst I classification is the entry-level classification in the series. Employees in this classification create and analyze routine, limited scope queries and data sets and compute

basic descriptive statistical operations. Employees are required to have a basic technical background and understanding of computer programming and statistical analysis and will develop overall expertise in data analysis and reporting functions, techniques and best practices. Upon successful completion of not less than two (2) years of active participation in data validation and the development of customized data reports, employees in this classification who have gained sufficient knowledge of the broader scope of more complex elements of the classifications responsibilities may advance, with the confirmation of duties and recommendation of department leadership, to the System Planning and Performance Analyst II classification.

The System Planning and Performance Analyst II is the professional-level classification in the series. Employees in this classification perform the full scope of duties related to the collection, analysis, validation and dissemination of data and data reporting, requiring a comprehensive knowledge of multiple database systems and coding techniques. Employees develop and analyze complex queries, reports and big data sets, serving as a technical resource and subject matter expert in the field. The System Planning and Performance Analyst II participates in the mentoring, training and development of division staff.

The System Planning and Performance Analyst III is the advanced-level classification in the series. Employees in this classification work with the most highly complex databases and datasets that are escalated beyond the expertise of entry and professional-level staff and use advanced research, programming and statistical methodologies to complete assignments. Employees create and deliver a variety of presentations including formal and hands-on training to develop to enhance the expertise of entry - and professional- level staff and district users and may represent the district at a variety of meetings or conferences related to assigned activities; may serve in a lead role, providing work direction and guidance to staff.

EMPLOYMENT STANDARDS:

Knowledge of:

Data collection, maintenance and reporting requirements of assigned student information systems.
Database table development in software such as Synergy, SASI, ESIS, Microsoft Access, Excel, or similar software.
Data collection techniques and best practices.
Microsoft Office Suite or similar, presentation, word processing, publishing and spreadsheet software.
Principles and techniques of educational research including measurement theory and statistical reporting.
High level mathematics including complex statistics
Statistical packages for analyzing large datasets such as SPSS, R, SAS or similar processes.
Record keeping techniques.
Applicable local, state and federal laws, codes, rules and regulations.
State, federal and district accountability and assessment programs as well as reporting requirements.
Effective customer service skills using tact, patience and courtesy.
Oral and written communication skills.
Data warehousing techniques and management.
Data visualization software (example: Tableau or Crystal Reports) their applications and uses.
Programming languages for data analysis and visualization and managing data in relational databases such as visual basic, SQL, Python or Julia.

Ability to:

Develop tables, databases, queries and spreadsheets.
Accurately collect, generate, validate and report on data; extract data from multiple sources, combine and manipulate data as needed.
Prioritize work and meet schedules and timelines; assure data reporting is completed in an accurate and timely manner.
Use a variety of databases and student information systems; learn and use a variety of student and employee software systems.

Troubleshoot and problem-solve data issues.
Maintain current knowledge of software or system upgrades, usage, and data manipulation techniques.
Use techniques and methodologies to analyze, manipulate and present data.
Access multiple complex data sets to perform statistical analyses and generate variety of reports
Advocate, model, learn and implement Portland Public School's Racial Equity Initiative.
Participate in, develop and provide user training; communicate concepts and procedures to audiences with a broad range of data-literacy skills.
Read, understand and apply detailed information concerning district, state and federal data collection and reporting policies and procedures.
Serve as resource and provide procedural assistance related to data literacy and reporting.
Communicate technical research or data concepts and procedures to a variety of audiences.
Ensure security of sensitive data.
Work under pressure and tight deadlines.
Establish and maintain cooperative and effective working relationships with others.
Operate a variety of technologies, computer equipment and various software programs relevant to educational assessment and research; input and retrieve data.

Education, Training and Experience:

The System Planning and Performance Analyst I requires a bachelor's degree in computer science, mathematics, business information or other related field and one (1) year of direct experience inputting information into databases, running database reports and creating simple databases and spreadsheets, using Microsoft™ Access and Excel, or similar software.

The System Planning and Performance Analyst II requires a bachelor's degree in computer science, mathematics, business information or other related field and a minimum of three (3) years of experience working with large data sets, generating reports, troubleshooting and resolving complex issues, developing tables, or two (2) years of experience as an System Planning and Performance Analyst I with Portland Public Schools is required.

The System Planning and Performance Analyst III requires bachelor's degree in computer science, mathematics, business information or other related field and a minimum of five (5) years of experience providing highly complex and difficult technical support and expertise analyzing and implementing data solutions related to data warehousing, validation, access, troubleshooting and resolving complex issues, developing sophisticated multi-level tables, models or reports and developing and presenting trainings is required.

Experience working in a public K-12 school district or public agency serving and supporting a richly diverse community is highly desirable.

Additional directly related, verifiable work experience may substitute for the Bachelor's degree on a year-for-year basis. A Master's degree in one of the identified disciplines may substitute for two years of the required experience.

Any other combination of education, training and experience which demonstrates the candidate is likely to possess the skill, knowledge, ability and trait characteristics essential for this classification may be considered.

Special Requirements:

Some positions in these classifications require the use of a personal automobile and possession of a valid driver's license.

WORKING CONDITIONS

The conditions herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Persons with certain disabilities may be capable of performing the essential duties of this class with or without reasonable accommodation, depending on the nature of the disability.

Work Environment: Work is performed primarily in a standard office environment and on school campuses with public contact and frequent interruptions.

Hazards: None.

Physical Demands: Primary functions require sufficient physical ability and mobility to work in an office and school setting and to routinely drive to and from District facilities; dexterity of hands and fingers to operate a computer keyboard and office equipment; sitting, standing and walking for extended periods of time; occasional kneeling, bending at the waist; lifting, pushing, pulling and carrying office equipment, computers, laptops and peripheral equipment, supplies and materials weighing up to 10 pounds; repetitive hand movement and fine coordination to use a computer keyboard; hearing and speaking to exchange information in person and on the telephone; seeing to read, prepare and assure the accuracy of documents.

FLSA: SPP DA I and SPP DA II: Non-Exempt; SPP DA III: Exempt

Approval Date: December 6, 2016

Bargaining Unit: N/A

Salary Grade: SPP DA I-19; SPP DA II-25; SPP DA III-33

Portland Public Schools recognizes the diversity and worth of all individuals and groups and their roles in society.

The District is committed to equal opportunity and nondiscrimination in all its educational and employment activities. The District prohibits discrimination based on race; national or ethnic origin; color; sex; religion; age; sexual orientation; gender expression or identity; pregnancy; marital status; familial status; economic status or source of income; mental or physical disability or perceived disability; or military service.

Board of Education Policy 1.80.020-P