

SEMINOLE COUNTY PUBLIC SCHOOLS, FLORIDA

Position/Job Description

DATA SCIENTIST

QUALIFICATIONS

- Bachelor's Degree with a major in statistics, math, technology, business, engineering, operations research, or education field from an accredited institution. Emphasis in higher-level mathematics, statistical analysis, assessment, measurement and/or computer programming preferred. Master's Degree in a similar field preferred.
- Five (5) years of experience in statistical analysis, research, and the presentation of complex subject matter. Other areas of similar experience may be substituted.

KNOWLEDGE, SKILLS, ABILITIES

- Knowledge of research design, sampling procedures, descriptive and inferential statistics, and data presentation techniques.
- Knowledge of test construction, scoring, and data normalizing techniques.
- Knowledge of state-wide required assessment construction, scoring, and school accountability.
- Ability to appropriately select and use data analysis tools and techniques.
- Ability to interpret performance data delivered in raw, converted, and chart form.
- Ability to convert performance data into useable information for the School Board, Superintendent, district personnel, school-based administrators, parents, teachers, and the media.
- Ability to adjust the presentation of performance data to meet the needs of the School Board, Superintendent, district personnel, school-based administrators, parents, teachers, and the media.
- Ability to adjust the presentation of performance data to match the level of understanding of the intended audience so it is understandable and informative.
- Ability to conduct and assist others in conducting action research.
- Ability and willingness to learn new software programs that assist in the analysis of performance data.
- Ability to assist and support the development and implementation of a student performance progress monitoring system.
- Ability to plan and organize schedules and timelines in an environment with constantly changing priorities.
- Strong organizational and interpersonal skills.
- Knowledgeable in the areas of Computer Science fundamentals, object-oriented design, and systems architecture.
- Competencies in modern object-oriented programming languages such as C#, Java, C++, etc.
- Advanced skills in querying relational databases including SQL Server and Oracle.
- Knowledge of business intelligence application such as Power BI or equivalent.

SUPERVISION

REPORTS TO Chief Technology Officer
SUPERVISES No Supervisory Duties

POSITION GOAL

To support the district's efforts to increase K-12 student achievement by monitoring, analyzing, evaluating, and communicating progression towards attainment of all instructional and operational goals in the District's Strategic Plan for Continuous Improvement, Building on Success.

PERFORMANCE RESPONSIBILITIES

1. *Actively engage in the design and implementation of statistical analysis approaches, which evaluate the impact of new educational strategies. This includes analytical reviews of new student curricula, professional development programs, teacher training programs and classroom practices.
2. *Monitor and evaluate all strategies within the District's Strategic Plan and periodically report findings to executive management.
3. *Conduct both cross-sectional and longitudinal analysis of student, staff, and operational data using a variety of techniques.
4. *Assume responsibility for the analysis of student outcomes on annual norm- and criterion-referenced tests.
5. *Assume responsibility for the interpretation of student achievement and test results; and prepare verbal, written, and visual reports for internal and external audiences.
6. *Disaggregate school test data using quantitative methods, including statistical analysis and interpretation.
7. *Provide consultative services in evaluation and research to countywide and individual school personnel.
8. *Assume responsibility for evaluation and research design, sampling, design of data collection instruments along with data collection strategies, statistical analysis, and execution for assigned projects, and follow through with established timelines.
9. *Prepare reports and make presentations as needed.
10. *Administer the collection of data from various departments and/or schools.
11. *Compile and verify data to produce regular and/or special statistical reports from various sources.
12. *Develop and/or select appropriate research designs, data collection instruments, evaluation models, and population samples to assist the Superintendent, Board and departments in assessing effectiveness of functions and programs throughout the school system.
13. *Maintain a database to ensure that data is retrievable and appropriately used through documentation and archiving for future use.
14. *Use statistical software to analyze data and prepare reports.
15. *Research and conduct evaluations of school based instructional programs.
16. *Review current developments, literature, and technical sources of information related to job responsibilities.
17. *Assist with the timely and accurate completion and submission of local, state, and federal reports as needed.
18. *Work with stakeholders throughout the organization to identify opportunities for leveraging company data to drive business solutions.
19. *Use predictive modeling to increase and optimize customer experiences, revenue generation, ad targeting, and other business outcomes.
20. *Experience using statistical computer languages (R, Python, etc.) to manipulate data and draw insights from large data sets.
21. Perform other duties as assigned by the Chief Technology Officer.

**Denotes essential job function/ADA*

EQUIPMENT / MATERIALS

Standard Office Equipment

PHYSICAL REQUIREMENTS

Sedentary Work Exerting up to 10 pounds of force occasionally and/or a negligible amount of force frequently to lift, carry, push, pull, or move objects. Sedentary work involves sitting most of the time. Jobs are sedentary if walking and standing are required only occasionally and all other sedentary criteria are met.

PHYSICAL ACTIVITIES

Sitting Resting with the body supported by the buttocks or thighs.
Standing Assuming an upright position on the feet particularly for sustained periods of time.
Walking Moving about on foot to accomplish tasks, particularly for long distances.
Talking Expressing or exchanging ideas by means of the spoken word. Those activities in which detailed or important spoken instructions must be conveyed accurately, loudly or quickly.

WORKING CONDITIONS

Indoors The worker is subject to inside environmental conditions. There is protection from weather conditions but not necessarily from temperature changes.

TERMS OF EMPLOYMENT

PAY GRADE AO-07-E \$76,811 - \$117,713 District Salary Schedule Months 12 Annual Days 258 Weekly Hours 37.5 Annual Hours 1935	POSITION CODES PeopleSoft Position TBD Personnel Category 14 EEO-5 Line 44 Function Vary Job Code 2121 Survey Code 77225	FLSA <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> Not applicable ADA Information Provided by Position Description Prepared by	BOARD APPROVED September 7, 2021 Previous Board Approval Bob Everland Bob Everland
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