



Job Description

Chart Code:

Location/Campus: Campus

School:

Position Details

Job Title: Data Analyst

Reporting to: Deputy Director General – Academic Affairs and Admission

Discipline:

Purpose of the Post:

The Data Analyst is responsible for the collection, validation, analysis, administration, maintenance, management and reporting of ENS System-wide data related to student information in order. The responsibilities include: collecting, validating, analyzing, maintaining, managing, and verifying student information that resides in multiple software applications used within ENS. These systems and applications include and are not limited to the following sources: ENS student information software program (PowerSchool); ManageBac; SeeSaw, ESIS; Learning Management System (LMS); MAP; EmSAT; SSAT; IBO; PISA; Timms; Cogat; Common Assessments; etc. and any additional software applications required to ensure the collection and reporting of accurate student information. The position will include working with data types as identified by the ENS Data and Reporting Center. The Data Analyst may be required to attend required trainings, train other staff members, collaborate with internal and external individuals/groups and will run district queries, collect data, manage and administer student information requirements, produce reports and coordinate programming needs. The Data Analyst will be responsible to manage the annual calendar for data collection, work to resolve data related issues and create reports and queries as necessary.

Job Description

- Attends Information Technology, student information system and other data related trainings as a representative of the Academic Affairs and Admissions Department and reports out on the training as required;
- Assists and provides training for support staff, teachers, administrators, campus data teams, coordinators, and others as needed;
- Provides leadership on management and administration of data entry issues and audits data for accuracy prior to distributing reports to staff;
- Works with software programmer(s) to create queries and reports that make data entry more efficient;
- Generates system reports that monitor input and accuracy of student data deposited in the student information software;
- Reviews system validation reports created from the student information software and ensures that data errors are corrected in a timely manner;



- Validates data input in all student-based information software applications within ENS and maintains necessary records for transaction purposes;
- Confirms data entry for all student testing results, in ENS, into approved software solution(s) and runs queries to validate that data entered is correct and accurate within the student information software;
- Isolates data and entry errors and provides solutions related to improving the accuracy of information in the Student Information Software Program;
- Performs error checking processes on all student data and assists school campuses with validation reports and corrections;
- Works collaboratively with all persons responsible for data collection within ENS;
- Executes all regular transaction processes necessary to maintain operations, records and databases;
- Performs processes related to extracting, importing and exporting of data in various database applications;
- Assists in the implementation, testing and validation of data and software systems;
- Performs data analysis of key problem areas to assist in root cause analysis and correction;
- Audits data on a regular basis to ensure data integrity and quality;
- Assists with ongoing data architecture processes and system governance;
- Researches and collects data to assist with product development and analysis;
- Train staff as necessary on data operational activities;
- Performs data reconciliations to identify data anomalies;
- Escalates data issues needing process re-engineering to proper authority;
- Performs quantitative and qualitative analysis on and with data available;
- Assists in preparation of data reports, training materials, business presentations, publications, marketing collaterals and other educational materials, as required;
- Using latest methods doing statistical analysis and building high quality prediction systems integrated with existing solutions.
- Extending Schools' data with third party sources of information when needed.
- Assess the effectiveness and accuracy of new data sources and data gathering techniques.
- Enhancing data collection procedures to include information that is relevant for building analytic systems.
- Develop processes and create automated anomaly detection systems and constant tracking of its performance.
- Develop custom data models and algorithms to apply to data sets.
- Develop A/B testing framework and test model quality
- Assist in maintenance, back up and security of business data; and,
- Performs other duties as assigned by the Deputy Director General for Academic Affairs and Admissions

Job Specification

Experience:



- 2 years' experience working in a Microsoft applications environment preferred. (Ex: Word, Excel, and Access);
- 2 years' experience working with Student Management Information System Software;
- 2 years' experience working with Business Intelligence tool and data cubes; and,
- 2 years' experience working with Database queries.

Education/Certifications Requirements: The Data Analyst positions requires:

- Bachelor of Arts or similar degree;
- Microsoft Access and Advanced Excel experience;
- Microsoft SQL Queries experience; and,
- ORACLE PL-SQL Queries experience.
- Experience working with and creating data architectures.
- Knowledge of advanced statistical techniques and concepts (regression, properties of distributions, statistical tests and proper usage, etc.) and experience with applications.
- Knowledge and experience in statistical and data mining techniques: GLM/Regression, Random Forest, Boosting, Trees, text mining, social network analysis, etc.
- Experience querying databases and using statistical computer languages like R, Python, SLQ, etc.
- Experience using web services like Redshift, S3, Spark, DigitalOcean, etc.
- Experience analyzing data from 3rd party providers like Google Analytics, Site Catalyst, Core metrics, AdWords, Crimson Hexagon, Facebook Insights, etc.
- Experience with distributed data/computing tools like Hadoop, Hive, Spark, Gurobi, MySQL, etc.
- Experience visualizing/presenting data for stakeholders.

Technical Competencies: The Data Analyst must be able to:

- Understand and use mathematical probability and statistical inference skills;
- Interpret a variety of instructions furnished in written, oral, diagram, or schedule form;
- Apply mathematical concepts, including but not limited to: fractions, percentages, ratios, and proportions in practical situations, as necessary;
- Read at a high level;
- Demonstrate high level oral and written communication skills, in English;
- Possess good interpersonal relationship skills;
- Demonstrate knowledge and experience dealing with educational data; and,
- Demonstrate experience and knowledge in working with student records reporting.

Ability to: The Data Analyst must be able to:



- Interface effectively with other departments, cross-campus data teams, school personnel, other maintenance staff, and business contacts from outside of the system;
- Solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists;
- Effectively present information and respond to questions from administrators, staff and the general public;
- Accurately perform assigned tasks;
- Perform duties with awareness of system-wide requirements and School Board Policies;
- Promote harmonious working relationships with staff and outside business representatives;
- Ability to work under strict deadlines; and,
- Maintain strict confidentiality concerning access and contents of information.

Core competencies:

- Accountability
- Analytical Thinking
- Data Visualization
- Accuracy

Additional Information

Leading a Team of: NA

Job Titles of Direct Reports: NA

Financial Authority: NA

Other Role Interactions: Data Teams, Teachers, Head of School, School Principal, Campus Director, Head of Curriculum, Education Quality Auditor, Deputy Director Generals, Director General