

## New

Ministry

Education

### Describe: Basic Job Details

#### Position

Position ID

Position Name (30 characters)

Sr Education Analytics Officer

Requested Class

Job Focus

Supervisory Level

Agency (ministry) code

Cost Centre

Program Code: (enter if required)

#### Employee

Employee Name (or Vacant)

#### Organizational Structure

Division, Branch/Unit

☐ Current organizational chart attached?

Supervisor's Position ID

Supervisor's Position Name (30 characters)

Supervisor's Current Class

### Design: Identify Job Duties and Value

#### Job Purpose and Organizational Context

Why the job exists:

The Funding Analysis and Analytics Branch is responsible for Alberta Education's K-12 Funding Model. The branch manages the K-12 funding framework, oversees the grant allocations of more than \$7 billion in operational funding to all school jurisdictions, private schools, charter schools and Early Childhood Service providers. The branch develops funding profiles, funding policies and procedures, and governs school authority funding. The branch helps K-12 Fiscal Oversight Sector in the preparation and submission of the three-year fiscal plan to Executive Committee, Minister, Cabinet Policy Committee and Treasury Board, and with the Deputy Minister and Minister for Committee of Supply. The branch provides support updating the Funding Manual for School Authorities that governs funding policy for the provincial education system. In addition, the branch ensures that appropriate controls are in place to mitigate risk to the Ministry in relation to the over \$7billion in operational grants in the Funding Framework annually.

The Branch develops the Alberta Education's student enrolment forecast model and grant indices. The branch provides flexible and responsive analytical capacity for the department, in collaboration with business and program areas across the division and Ministry. The branch works to provide quality data and reporting to serve the Ministry in efforts to use evidence to inform decision-making. Data analytics and business intelligence functions are key in meeting these responsibilities. These functions include several activities related to data analysis and modeling of data from the Ministry's information collection applications, analysis and management of information requirements, business intelligence exploration, applied research and

program evaluation.

## Responsibilities

Job outcomes (4-6 core results), and for each outcome, 4-6 corresponding activities:

This position provides complex financial analysis and budgeting services in support of the Ministry financial process. Reporting to the Team Lead, Funding Analysis and Analytics Branch, the Senior Education Analytics Officer works in a team environment and within the parameters of relevant legislation; Ministry and government policies, guidelines, and business practices; to complete timely and accurate school authority budget allocation and profiles. These documents and projections are critical inputs to Executive Team decision-making and support the coordination, compilation, and consolidation of Ministry budget and financial submissions to Alberta Treasury Board and Finance.

The Senior Education Analytics Officer provides comprehensive fiscal analysis, and cost modeling services, as well as assisting with the preparation and presentation of the operational expenditure forecast model to the Director, Executive Director, and Assistant Deputy Minister. This position also analyzes financial situations and develops corresponding options, solutions, and recommendations. The Senior Education Analytics Officer is relied on to apply fiscal analysis expertise as part of the senior management decision-making processes.

Fiscal analysis activities undertaken by the Senior Education Analytics Officer include the development of scenarios, models, and methods to describe, examine, and evaluate solutions to complex budget and financial issues facing the Ministry and contribute to informed decision-making by senior Ministry representatives and stakeholders. In addition to assisting with the compilation and development of the Ministry's budget and financial submissions to Treasury Board, this position represents the unit on Ministry and cross-government teams and committees dealing with budgeting, financial, and associated activities and initiatives.

Senior Education Analytics Officer takes a leadership role in the planning, visioning and exploration of Ministry business intelligence and analytical products and solutions. The position works in a co-creative manner with business areas across the Ministry to identify valuable products, develop prototypes, present the prototypes to various audiences, and identify priorities and approaches to implementation.

Working in a team environment, the Senior Education Analytics Officer works with internal and external Alberta Education stakeholders to analyze business information requirements in order to design analytical solutions for Ministry staff and various stakeholders. This position works closely with business areas to develop analytical and forecasting reporting products. This position coordinates the compilation, evaluation, analysis and dissemination of information to address customer information requests and works with a team of data analysts to address these needs.

This position also works in collaboration with program managers and senior technologists to promote teamwork, communication, quality service, and shared achievement of desired outcomes. The position is client-focused and has a clear mandate to work closely with Ministry business areas in order to identify their analytical requirements, interpret them and develop effective analytical solutions to address them.

As a key member of Funding Analysis and Analytics Branch, major responsibilities of the position include:

- Plans and forecasts a funding model to help identify funding framework implications, demographic and enrolment changes, and grant rates.
- Analyses demographic and financial data to determine trends, risks, and opportunities.
- Develops and maintains processes and systems to track spending to ensure expenditure targets are not exceeded.
- Develops, coordinates and prepares the annual school authority funding framework allocations
- Coordinates, reconciles, and manages budget profiles and enrolment projections.

The Senior Education Analytics Officer reports to Team Lead, Funding Analysis & Analytics Branch

## Problem Solving

Typical problems solved:

**Fiscal responsibility is ensured and the requirements of the provincial ECS to Grade 12 education system are met through appropriate management of approved operating targets for school authorities.**

- Plans and forecasts a funding model to help identify funding framework implications, demographic and enrolment changes, and grant rates.
- Analyses demographic and financial data to determine trends, risks, and opportunities.
- Develops and maintains processes and systems to track spending to ensure expenditure targets are not exceeded.
- Develops, coordinates and prepares the annual school authority funding framework allocations, as well as working with Strategic Financial Services for the quarterly and monthly expenditure forecast submissions relative to the Operating Support for School Jurisdictions; Accredited Private Schools and Early Childhood Service Operators; and the three-year Business Plan.
- Coordinates, reconciles, and manages budget profiles and enrolment projections.
- Assesses the environmental situation and its impact on the educational and political environment, identifying strategic, operational, and political opportunities, risks and threats in the areas of funding, fiscal health and external factors.

**Comprehensive and complex financial, analytical, and consultative services are provided to support effective Ministry financial operations.**

- Provides financial analyses and information as requested by senior Ministry officials (e.g., relationship between school authority funding costs and expenditure levels, identification and interpretation of cost drivers, etc.)
- Analyzes data and financial submissions, identifying risks and developing options as appropriate and providing recommendations.
- Analyzes complex issues and compares jurisdictional models to funding model for adequacy, equitability, and sustainable education funding.
- Collects, analyzes, and prepares financial data and contributes to development and refinement of funding framework for input to decision-making by the Executive Team, Deputy Minister, and Minister.
- Interprets government and Ministry financial reporting guidelines for Ministry representatives and develops financial reports and recommendations to assist senior and executive managers in making informed decisions.
- Examines issues identified by school authorities related to funding and financial health and recommend alternatives and solutions where appropriate.
- Performs ad-hoc and time sensitive analyses requested from the Minister, Deputy Minister and senior management requiring knowledge of the education system and creative and complex analytical skills
- Provides guidance, expertise, and recommendations to assist and influence Ministry representatives and stakeholders to make financial decisions.

**Designs and delivers data analytics products and services to the education user community using appropriate methodologies.**

- Designs and conducts appropriate statistical data analysis to support departmental initiatives and projects;
- Develops and maintains methodologies for socioeconomic analysis of student/school results and student cohort analysis;
- Develops questionnaires and surveys and coordinates the implementation of surveys;
- Determines the most appropriate statistical and analytical methods, and applies advanced statistical techniques as required, and interprets the results to identify the implications; and
- Provides consultative advice to department staff to develop appropriate indicators and measures for department and government plans and program initiatives and test the relevancy, reliability and validity.

**Influences the development of analytical products for departmental and external stakeholders.**

- Assists in determining the use of analysis for the improvement of the performance of the education

system

- Identifies stakeholder (departmental staff, school and jurisdiction administrators and the public) analytical requirements and develops approaches and products to meet these requirements;
- Reviews and evaluates the effectiveness of analytical services provided by the branch and make recommendations for improved approaches; and
- Conducts regular reviews of technologies used for information dissemination to ensure maintainability and suitability for changing business needs.

**Builds analytical capacity of business areas to become more self-sufficient in directly accessing and using data to meet their information requirements.**

- Works with technical staff and stakeholders to refine business information requirements;
- Assists clients to develop and/or enhance their skills to levels required to achieve their objectives;
- Provides consultation, guidance, information, and publications relating to business intelligence and reporting to stakeholders;
- Promotes education and awareness of clients as to general concepts and responsibilities relating to effective information and data management;
- Coordinates the data analysis requests from internal and external stakeholders; and
- Ensures the Freedom of Information and Protection of Privacy Act is adhered to with respect to dissemination of information.

**Investigates and recommends new methods, processes, and trends relating to data analysis and business intelligence.**

- Investigates new approaches, methodologies, and technologies to identify those with potential to provide enhanced analytical solutions to stakeholders;
- Recommends acquisition of software and technologies that will provide clients with enhanced and more efficient access to business information; and
- Participates in enterprise architectural activities to develop and maintain Ministry Business Intelligence architectural vision, architectural design and standards

**Contributes and provides support to Funding Analysis and Analytics Branch project teams.**

- Participates as a key resource in analytical projects;
- Represents Funding Analysis and Analytics Branch on Ministry and cross-government working groups, committees, and initiatives as required; and
- Provides support and input to development of policies and standards relating to data integrity, privacy, security, standards, sharing, repository, and retention.

Types of guidance available for problem solving:

The levels of complexity and creativity are the highest required of an incumbent in a program services role, as the incumbent is expected to work independently once overall objectives are identified by the Team Lead. The incumbent plays the lead role in developing the sector's analytical strategy and is seen by business areas as the point person for analytical engagement, conceptualization and leadership.

Direct or indirect impacts of decisions:

This position's activities are diverse in nature reflective of the variety of responsibilities of the analytical function. Therefore, the position and the work done by the incumbent are impacted by the needs of all business areas of the Ministry and, in certain circumstances, other Ministries, school authorities, stakeholders, and others external to the Ministry depending upon the nature of the issue or opportunity.

**Key Relationships**

Major stakeholders and purpose of interactions:

Position is required to communicate with staff and management across all business units of the department, and with staff and management in ITM; with senior management in Alberta Education and other Ministries, and stakeholders.

Contacts are for the purposes of collecting and providing information, working together collaboratively to develop valuable products, providing presentations, participating in reviews of reports and recommendations both by the incumbent and by others.

## Required Education, Experience and Technical Competencies

Education Level	Focus/Major	2nd Major/Minor if applicable	Designation
Bachelor's Degree (4 year)	Business	Economics	

If other, specify:

Master's degree in related discipline with focus on research and statistical analysis.

Job-specific experience, technical competencies, certification and/or training:

A Master's degree in business, economics, statistics or in a discipline related to the position assignment with focus on research and statistical analysis.

Experience in analyzing qualitative and quantitative data, statistical methodologies, data collection, validating, and developing metadata.

Strong and demonstrated analytical capabilities. Extensive and demonstrated computer experience in the use of advanced software for data management and statistical analysis such as MS Excel and/or SPSS / Python / SQL.

Sound and demonstrated ability to communicate verbally and in writing using appropriate means to convey information.

The ability to balance a variety of tasks as the incumbent will be required to work on several projects -- often of equal priority --at the same time.

Skill in the use of the problem-solving process to determine innovative solutions that are unknown, to develop new procedures and to identify and analyze initiatives in the areas of program and policy development.

Theoretical knowledge including principles and practices in basic (K-12) learning, project management and consulting supplemented by substantial related work experience.

Skill in communicating with clarity in writing and orally on an individual basis and with groups.

Understanding of Alberta Education goals, issues, priorities and core businesses.

Understanding of department/division/unit business and operational plans, learner issues.

Knowledge of policies, legislation and programs of Alberta's education system.

Skill in understanding underlying organizational issues and addressing the long-term reasons.

Ability to persuade, convince, influence effectively.

Ability to develop and maintain win/win relationships and partnerships with a wide circle of people beyond those involved in current activities in order to achieve the department's strategic plans.

Ability and skill in understanding the big picture and continually gathering information to expand individual understanding and to position staff for change.

Ability to influence outcomes that focus on organizational goals.

Ability to identify and act on opportunities to partner with other ministries/organizations to achieve desired results.

Ability to initiate actions to optimize resources for the achievement of improved results.

## Behavioral Competencies

Pick 4-5 representative behavioral competencies and their level.

Competency	Level					Level Definition	Examples of how this level best represents the job
	A	B	C	D	E		
Systems Thinking	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Takes a long-term view towards organization's objectives and how to achieve them:</p> <ul style="list-style-type: none"> <li>• Takes holistic long-term view of challenges and opportunities</li> <li>• Anticipates outcomes and potential impacts, seeks stakeholder perspectives</li> <li>• Works towards actions</li> </ul>	

		and plans aligned with APS values • Works with others to identify areas for collaboration	
Creative Problem Solving	<input type="radio"/> <input type="radio"/> <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>	Engages the community and resources at hand to address issues: • Engages perspective to seek root causes • Finds ways to improve complex systems • Employs resources from other areas to solve problems • Engages others and encourages debate and idea generation to solve problems while addressing risks	
Drive for Results	<input type="radio"/> <input type="radio"/> <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>	Takes and delegates responsibility for outcomes: • Uses variety of resources to monitor own performance standards • Acknowledges even indirect responsibility • Commits to what is good for Albertans even if not immediately accepted • Reaches goals consistent with APS direction	
Agility	<input type="radio"/> <input type="radio"/> <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>	Identifies and manages required change and the associated risks: • Identifies alternative approaches and supports others to do the same • Proactively explains impact of changes • Anticipates and mitigates emotions of others • Anticipates obstacles and stays focused on goals • Makes decisions and takes action in uncertain situations and creates a backup plan	