

## Update

Ministry

**Describe: Basic Job Details****Position**

Position ID

Position Name (200 character maximum)

Current 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****Changes Since Last Reviewed**

Date yyyy-mm-dd

Responsibilities Added:

Responsibilities Removed:

## Job Purpose and Organizational Context

Why the job exists:

The Data Management and Governance (DMG) unit's mandate is to develop, implement, and evolve

1. collection and stewardship of the Department's major administrative datasets.
2. provision of data and data products based on those data sets to government, stakeholders, and the public.
3. enterprise-wide data management and governance.

The Lead operates in a complex environment of government and stakeholder relationships, and must balance many conflicting needs to produce the meaningful results Advanced Education depends on.

The Lead manages the entire lifecycle of their dataset from design through to use, including developing and implementing metadata and quality standards, security and privacy management, collection, validation, reporting, and analysis. The Lead ensures that data collection, processing, reporting, and sharing complies with relevant legislation, and works with colleagues and clients to address any gaps or issues.

The Lead is the pre-eminent expert on every aspect of the data in their care and provides all guidance pertaining to it. The Lead collaborates with policy and research professionals to ensure good use of data in accountability functions, post-secondary research and the development of metrics at the institutional, provincial, national, and international levels. The Lead also provides expert advice on data design, collection, and maintenance to other GoA business areas, supporting best practices in data stewardship.

Unit work, in turn, helps build evidence to inform department decision-making and policy development, so the Lead collaborates with ministry colleagues to help inform policy development, other data systems, and other accountability mechanisms (for example, Key Performance Indicators).

The Lead must understand and apply the *Tuition and Fees Regulation*, the *Protection of Privacy Act*, and the *Post-Secondary Learning Act*.

## Responsibilities

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

### **1. Ensure operational financial data and tuition data are relevant, standardized, accessible, and usable**

#### *Relevant*

- Understand the data needs indicated by the GoA's and Department's accountability and policy directions, by changes to relevant legislation, and by regular dialogue with post-secondary institution contacts.
- Lead changes to these datasets to meet emerging needs, balancing new requirements with reporting continuity.

#### *Standardized*

- Establish, document, maintain, and enforce data definitions, standards, and business rules.
- Create and manage metadata: define and manage business terminology, allowable values, and other critical meta-data.
- Identify and resolve data quality problems.
- Support post-secondary institution contacts to submit data correctly.
- Ensure operational data governance is documented, understood, and maintained in practice.

#### *Accessible and usable*

- Promote awareness of the dataset and its characteristics to appropriate audiences.
- Ensure the datasets are catalogued as part of the Department's enterprise data management.
- Ensure data are appropriately available to a variety of users: internal and external, those with and without financial acumen.
- Ensure information products are available to support frequently asked questions.
- Define, provide, and automate (where possible) data services for key users.

## 2. Provide expert advice

- Monitor trends and fluctuations in financial performance of post-secondary institutions and brief up as needed.
- Provide researchers, institutions, other colleagues support to correctly interpret operational financial data.
- Work with financial, research, and policy colleagues to develop relevant information products using operational financial data and tuition data.
- Support work to develop and refine indicators related to post-secondary performance: for example, the financial health of Alberta's post-secondary institutions.
- Work with research colleagues to identify possible research opportunities in institution and system financial behaviour.

## 3. Guide data system development, enhancement, and maintenance

- Collaborate with colleagues and post-secondary contacts to improve data systems for more reliable, comparable, and integrated analysis of post-secondary financial information.
- Guide development/re-development of data systems to collect, validate, and make available administrative data, ensuring balance of existing and emerging needs, value for effort, interoperability with other systems, and assurance of data integrity and security.
- Ensure appropriate business influence over system maintenance and enhancement including agenda setting, issue prioritization, and issue escalation.
- Ensure data processes are appropriately automated to maximize efficiency and free staff effort for work requirement human judgment, interpretation, and creativity.
- Build and maintain strong relationships with IT colleagues to ensure clear communication and effective collaboration.

## 4. Build strong stakeholder relationships

- Support institution contacts to understand the reasons, methods, and timelines for data submissions.
- Work with institutional contacts to understand their business needs, how to maximize the return-on-investment for the data they provide, and how to improve data quality, processes, and sharing.
- Represent stakeholder interests within the ministry and ministry interests to stakeholders.
- Meet with post-secondary institutions annually or as needed to communicate data-related changes, gather feedback, and develop system, process, and data quality improvements.

## 5. Support the Department's data management and governance efforts

- Contribute knowledge of operational financial data and tuition data to the development the Department's master data management framework, data governance framework, and implementation roadmaps.
- Help to socialize data management concepts with colleagues and stakeholders as appropriate.
- Help data management colleagues understand operational financial data and tuition data elements for the purpose of data modelling, cataloguing, and warehousing.

## Problem Solving

Typical problems solved:

The Lead must meet a wide range of challenges, from granular information system problems to chronic, systemic culture issues. Examples include the following:

- *change*: Advanced Education is maturing as an information organization. The Lead will face resistance from inside and outside the organization and must find ways to ease concerns and rally colleagues and stakeholders to the cause.
- *opposing needs*: The Lead works with many individuals and groups across the organization and the advanced learning system, serving as a critical diplomat in brokering agreement among colleagues with conflicting needs and priorities. A long-term, enterprise view is essential in solving such problems.
- *complex, long-term problems*: Data management problems are often entangled and complex. The Lead will have the tenacity to tackle these issues and see them through to their conclusion, marshalling resources as needed.
- *working in an emergent space*: The organization knows it needs to modernize data collection and mature its data management, but not always what that means. The Lead is always looking for ways to improve the coherence and value of data management activities. When clear direction is not self-evident, the Lead envisions new ways to mature data management in the Department.

Types of guidance available for problem solving:

The Lead works within the policies and guidelines set by Cabinet, Treasury Board, the Minister, the Deputy Minister, and legislation with associated regulations including the *Post-secondary Learning Act* and the *Tuition and Fees Regulation*, the *Protection of Privacy Act*, and the *Personal Information Protection Act*. Additionally, the Lead has access to the Manager for guidance.

Within these parameters, the Lead has autonomy and authority to determine priorities and approaches to work, communication, and relationships.

Direct or indirect impacts of decisions:

Working with the Manager, the Lead ensures Advanced Education has reliable, usable data about the post-secondary system in Alberta, and is accountable for resolving issues that arise in pursuit of that goal. The position has the freedom to develop and implement frameworks and policies aligned with the GoA's data management guidelines and the Department's strategic objectives. The position is expected to act independently to ensure a coordinated approach within the unit, and to support coordination at the Department level.

The role has a significant impact on the Department's core business functions which all depend on the quality, availability, and usability of data. For example, these data feed metrics in post-secondary institution funding agreements (Investment Management Agreements) and in the Department business plan.

In this way, the position has significant direct influence on all business areas and stakeholders that generate and use administrative data.

## Key Relationships

Major stakeholders and purpose of interactions:

**Publicly-funded post-secondary institutions:** For each data collection, staff who prepare data submissions and key decision-makers who influence institution buy-in for data provision.

Daily to Weekly

Purpose: Engagement and problem-solving to ensure institution concerns and ideas are heard, and data is prepared well and submitted on time.

**Business areas:** for each dataset and digital service, expert staff who understand and depend on the data and its systems

Daily to Weekly

Purpose: Engagement and problem-solving to ensure coordination, improved data management, and enterprise data standards.

**Digital Services staff:** product owners, IT contractors, data architects, data consultants

Daily to Weekly

Purpose: Engagement and problem-solving to provision data as digital services are developed

**IT colleagues:** staff who understand and maintain particular data systems, enterprise architects, data architects, application owners groups

Daily to Weekly

Purpose: Design, coordination, strategy, problem-solving to develop and maintain good data management

**Users/Consumers:** Department and GoA

Daily to Monthly

Purpose: Service delivery, use cases

**Governance bodies:** GoA- and department-level data management bodies

Monthly to Quarterly

Purpose: Guidance, coordination, strategy, decision-making

**Executive:** Executive Director Council, Executive Team

Ad hoc Approvals

**External:** national bodies (e.g., Statistics Canada, Council of Ministers of Education Canada), external contractors

Ad hoc Coordination, influence, and learning

### Required Education, Experience and Technical Competencies

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

If other, specify:

Accounting, Finance

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

The Lead should be knowledgeable in the following areas:

#### Accounting / Finance

- Accounting principles and best practices including Public Sector Accounting Standards
- Integrating financial results with operational activities of an organization
- Ministry and post-secondary financial reporting systems and related information management systems
- Data validation, statistical analysis, and quantitative and qualitative research methods

#### Data management

- Best practices in data management and governance, including the Data Management Body of Knowledge (DAMA-DMBOK) and Government of Alberta standards and policies.
- Working with databases and data warehouses, including writing and automating queries in SQL, Python, etc.
- Data documentation such as data dictionaries, business glossaries, data models, entity relationship diagrams.
- Descriptive statistics and quantitative data analysis
- Data reporting and analysis tools such as: PowerQuery, PowerPivot, PowerView, and PowerBI

#### Advanced Education and the advanced learning system

- Concepts related to learning delivery, measurement, credentials, etc.: for example, off-campus, full-load equivalent, university transfer
- Relevant legislation and regulations (for example, the *Post-Secondary Learning Act* and the *Protection of Privacy Act*)
- Department data systems, IT support structures, and IT projects
- Department structure, operations, and programs; Alberta's advanced learning system (providers, sectors, governance)

#### Change management

Change management principles and their application

### 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 checked="" type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	<p>Considers inter-relationships and emerging trends to attain goals:</p> <ul style="list-style-type: none"> <li>• Seeks insight on implications of different options</li> <li>• Analyzes long-term outcomes, focus on goals and values</li> <li>• Identifies unintended consequences</li> </ul>	<ul style="list-style-type: none"> <li>• Understands and acts with an awareness of the many stakeholders involved in data management across the department's business areas and IT supports.</li> <li>• Seeks to understand data needs and uses from multiple perspectives: business, technical, enterprise.</li> <li>• Thinks though effects of data-related changes.</li> </ul>
Creative Problem Solving	<input type="radio"/> <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	<p>Focuses on continuous improvement and increasing breadth of insight:</p> <ul style="list-style-type: none"> <li>• Asks questions to understand a problem</li> <li>• Looks for new ways to improve results and activities</li> <li>• Explores different work methods and what made projects successful; shares learning</li> <li>• Collects breadth of data and perspectives to make choices</li> </ul>	<ul style="list-style-type: none"> <li>• Asks the right questions to deepen understanding of human, business, and IT issues.</li> <li>• Imagines new ways of doing work and adding value, seeking to automate where appropriate</li> </ul>
Drive for Results	<input type="radio"/> <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	<p>Works to exceed goals and partner with others to achieve objectives:</p> <ul style="list-style-type: none"> <li>• Plans based on past experience</li> <li>• Holds self and others responsible for results</li> <li>• Partners with groups to achieve outcomes</li> <li>• Aims to exceed expectations</li> </ul>	<ul style="list-style-type: none"> <li>• Focuses on outcomes of data work, planning for deliverables and looking for opportunities to add value.</li> </ul>
Develop Networks	<input type="radio"/> <input checked="" type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	<p>Works on maintaining close relations with all stakeholders:</p> <ul style="list-style-type: none"> <li>• Identifies key stakeholder relationships</li> <li>• Has contact with range of interested parties</li> <li>• Actively incorporates needs of a broader group</li> <li>• Influences others</li> </ul>	<ul style="list-style-type: none"> <li>• Connects with key business and IT contacts to understand their needs and constraints, and to ensure a focus on meaningful data outcomes for the organization.</li> </ul>