

***FRAMEWORK FOR
MANAGEMENT DEVELOPMENT
IN THE FEDERAL
SCIENCE & TECHNOLOGY
COMMUNITY (S&T)***

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DEVELOPMENT**

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Framework for Management Development in the Federal Science & Technology Community (S&T)

Introduction

“In our view, significant improvements are required in the management of scientific personnel if departments and research establishments are to tackle successfully the significant challenges facing them. Achieving the objectives and adhering to the priorities to be determined by the government as a result of its current science and technology review and other reform initiatives will depend, to a large extent, on the degree to which sufficient attention is devoted to the management of scientific personnel and to the development of a stronger capability in research management.”

Auditor General. 1994. Chap. 11. Main Point 11.6

“To ensure that the Public Service of Canada remains a strong, representative, professional and non-partisan national institution that provides Canadians the highest quality service into the 21st century, the Government will also focus on the recruitment, retention and continuous learning of a skilled federal workforce.”

Speech from the Throne, October 1999

In response to the recommendations of the Auditor General in Chapter 11 “Science and Technology: The Management of Scientific Personnel in Federal Research Establishments” of his 1994 report, Treasury Board Secretariat initiated a series of projects to improve human resources management in federal science-based departments. An important objective of this initiative is to improve the competency of managers of scientific and technical programs.

The first project under the initiative was “Management and Scientific Training and Development” which was completed in 1996. This report recommended a systematic approach to training and development of S&T managers based on meeting departmental needs for learning to support their business plans.

Subsequently, a second report “S&T Management Development Program” was produced in 1998. This report defined competencies needed by S&T managers and made recommendations on how to nurture and develop these characteristics of managers.

This framework aims to define roles and responsibilities of the various organizations who must work together to implement an effective management development strategy for the science and technology community within the federal public service. It also outlines a governance structure to allow the various partners to work together effectively.

1. Management Development Means Developing Management Competencies

The S&T Community has identified seven key competencies for managers:

1. Technical
2. Self-Management
3. Teamwork
4. Leadership
5. Management
6. Client and Partner Management, and
7. Responsibility to Society

Of these, technical mastery is a necessary characteristic of S&T managers which is not found in general executive or management competency profiles, but the remaining six key competencies are similar to competencies identified for other managers.

Management development aims to increase the knowledge, skill and awareness of managers at all levels, related to management competencies. Management development is not professional development. The knowledge needed for obtaining and maintaining professional qualifications is not addressed in this framework.

The preferred approach to management development is self-directed learning initiated by individual managers, within a context of continuous learning and a learning organization. Learning should follow a cycle with assessment of level of competency, identification of target competency for learning, choice of learning options, use of the chosen options, reflection on what has been learned and re-assessment of competency level. For self-directed continuous learning to work effectively, content options are needed to improve knowledge, skill and awareness level by level for the targeted competencies, together with tools to assess competency levels and to choose appropriate options. A

framework and culture to provide support to learners and to recognize the value of improved competency are also needed. This infrastructure does not exist and must be constructed to give managers the support they need.

The organizations involved, including the S&T Community, agree to assume individual responsibilities and to work together to provide learning options and infrastructure to support the development of S&T managers and the sharing of learning within the public service.

2. Purpose

To strengthen the leadership and management of federal science and technology organizations by helping existing managers increase their mastery of the management competencies required for their current jobs and helping scientists and managers prepare themselves to be effective in future management jobs.

3. Vision

Management development in the S&T Community is a shared responsibility of corporate agencies, the S&T Community, science-based departments, and individual managers.

Learning and development is most effective if it is initiated by the individual manager, guided and supported by his or her organization.

Departments, the S&T Community, and corporate agencies should support S&T management development by providing a system of supporting infrastructure including tools to assess the competencies of managers, direction on the competency needs of the organization, tools and expert advice to facilitate drafting personal learning plans, and a wide range of learning options.

Organizations have a responsibility to provide managers learning and development opportunities and to encourage the growth of a culture of continuous learning in which supervisors and managers play active and complementary roles.

Learning and development opportunities should include conference attendance, classroom learning, workshops and seminars as well as opportunities 'to learn by doing' by participating in task forces, deployments, exchanges with other organizations, and corporate or community development programs. Coaches and mentors should be part of the management development system.

Learning should involve group activities to promote networking and the dissemination of knowledge in a learning organization.

Each member organization should finance its respective contribution to the combined management development system. The S&T Community will finance its initiatives by shared contributions from participating science-based departments in support of specific projects.

Collectively, the organizations working together to deliver a management development system for the S&T Community also have a responsibility to monitor and assess its implementation and performance and to make improvements when and where needed.

4. Parties

Corporate Agencies:

- Canadian Centre for Management Development
- Public Service Commission (Training and Development Canada)
- The Leadership Network

Treasury Board Secretariat (through participation in the S&T Human Resources Senior Steering Committee and the Learning and Development Committee)

S&T Community (represented by S&T Human Resources Senior Steering Committee and community ADM Champion)

Science-Based Departments (represented by departmental executive champion)

Managers of Science and Technology Organizations in the Federal Public Service

The Professional Institute of the Public Service

5. Roles and Responsibilities

5.1 S&T Managers

S&T managers play a dual role in management development. They are the clients for the program and they are also part of the delivery of the program for subordinates and peers. Individual managers

receive feedback and direction from their departmental management team but are responsible for choosing their career path and initiating their own training and development. They use assessment tools including 360-degree feedback together with competency profiles for their current and desired future jobs to determine which management competencies to develop.

S&T managers initiate learning by drafting their own personal learning plans and choosing which options to follow to increase their level of knowledge, skill and awareness. They use the content offered by the management development program and provide feedback to the program

about the value of the content and tools and how to improve them. They share the knowledge they gain with others in a continuous learning process.

As supervisors, S&T managers also give direction and support for the development of their subordinates. They have the major role in defining desired management competencies within their organization. They have a responsibility to ensure that the learning and development needs of the organization reporting to them are addressed and to contribute to assessing the impact of management development within their organization. They should ensure fairness and equity in the allocation of developmental opportunities among subordinates. They approve personal learning plans of subordinates and coordinate their preparation if they include team development initiatives, taking into consideration the needs and developmental desires of the subordinate as well as the operational and competency needs of the organization. They support subordinates by providing feedback and guidance. They provide development opportunities for subordinates in their daily work and support subordinates in applying new knowledge and capabilities in their jobs. They provide access for subordinates to departmental resources such as development secondments, educational leave, and training funds. They may serve as mentors and coaches for others. They organize their subordinates workloads and responsibilities so as to promote a continuous learning culture.

S&T managers become party to this framework and accept their roles and responsibilities by registering personal learning plans for management development.

5.2 Science-Based Departments

Science-based departments are responsible for providing content options that are unique to themselves. Each science-based department will identify an executive champion who will be the focal point for departmental accountability. They monitor the performance of the management development program in their organization, both in terms of individual progress and effectiveness of the program. They make available and apply assessment tools for their managers. They establish and maintain learning accounts

to ensure that the value of management development is recognized and resources are made available for it. They ensure that managers play an appropriate management role including the provision of coaching and mentoring services. Departments identify scientists and engineers with the potential and desire to become managers. Departments establish and communicate competency profiles for existing and future management jobs. They provide roadmaps to assist managers to choose development options using departmental content offerings. They provide incentives for learning by making development real through using competencies in staffing positions, by providing recognition, and in other ways. They evaluate the impact of the management development program on their own department. They provide feedback to the Community and the centre.

5.3 S&T Community

The S&T Community is represented by the S&T Human Resources Senior Steering Committee and by an ADM champion for management development. The ADM champion is supported by a working group drawn from science-based departments. The Community is responsible for providing content options that are unique to the S&T Community but shared across science-based departments. The Community annually monitors the performance of the development program within the Community. The Community establishes community-wide competency profiles for management jobs. The Community is responsible for communicating these profiles and information about management development in the Community. The Community recommends improvements in the management development program including the provision of direction on development priorities common across the community.

5.4 Corporate Agencies

CCMD has a mandate to support the growth and development of public sector managers. The Centre supports the evolution of the Public Service of Canada as a learning organization. CCMD provides content options that are common to management development across the whole Public Service. CCMD provides assessment tools of value to managers across the Public Service and roadmaps and other navigational tools to assist managers in selecting learning options. Training and Development Canada (TDC) of the Public Service Commission provides content elements that are common to professional development across the Public Service. CCMD and TDC evaluate the impact of the development program on the Public Service and recommend improvements. Corporate Agencies provide the Web site for the S&T Community management development system.

6. Governance

The effective delivery of management development by many partners to S&T managers in many departments requires a governance structure to define accountabilities and provide focal points for decision making and resolution of differences. The structure below identifies an executive champion within each partner organization who is responsible for his or her organization's performance in the overall framework. Information on the performance of the system flows to each executive champion and is presented to the decision making committee fora. The intent is to resolve issues at the lowest possible level and to promote continuing improvements in the content and delivery of management development to this Community by providing feedback to all levels of governance.

The Learning and Development Committee is the primary forum for oversight of the management development system and for ensuring its integration into public service wide management development. This role is part of the second item of the Committee's mandate : "to

better coordinate all aspects of learning among provider departments and central agencies to the benefit of all public servants". It decides on changes in purpose and organization of the management development system and identifies corporate level needs. It reviews workplans of CCMD and TDC to provide public service wide content and assessment and navigation tools for the S&T Community. It resolves differences related to management development of S&T managers between corporate agencies and between the Community and corporate agencies. It approves an annual report to stakeholders and central agencies. The Community ADM champion should participate in Learning and Development Committee discussions of S&T Community issues, if he or she is not already a member. The Chairperson of the Learning and Development Committee may refer issues to COSO, TBSAC or other decision-making fora if needed.

A small secretariat for S&T Community management development, based in CCMD, is the steward of community-wide content, assessment and navigation tools, and community-wide databases. The secretariat produces annual reports on the Community's development system, keeps the Community up to date on trends in management development, forecasts S&T Community needs for corporately provided development services, and prepares material for the top level decision making forum, the Learning and Development Committee. The secretariat is composed of an expert in learning who forms a link between CCMD and the S&T Community and a part-time administrative support person.

The S&T Human Resources Senior Steering Committee is responsible for oversight of the S&T Community's performance in the partnership framework. It approves budgets and workplans for projects to prepare the content jointly provided by the community, reviews reports on system performance and recommends improvements to the system. The committee resolves differences

between departments on their contributions to the joint community effort.

An S&T Community ADM Champion of Management Development coordinates work at the Community level including reporting on the implementation of the management development system and recommending improvements to it. The ADM Champion should represent the Community in discussions of S&T Community management development at the Learning and Development Committee.

An S&T Community Management Development Working Group supports the ADM champion. The Working Group includes representatives of all science-based departments as well as the secretariat's learning expert and a representative of the Professional Institute of the Public Service. The Working Group compiles reports on the implementation and effectiveness of the management development system across the community, identifies needs for new courses or other learning options, proposes improvements to the system's infrastructure, and exchanges information on management development between departments. The working group should seek and obtain feedback from S&T managers at the levels of aspiring manager, manager of teams and manager of managers, to reflect the point of view of the full range of program clients.

Departmental Executive Champions (who may be the ADM members of the Senior Steering Committee) are responsible for oversight of management development for the S&T Community within their respective departments. They monitor the progress of managers in their departments and the availability of needed content, tools and management support.

The Professional Institute of the Public Service is a member of the S&T Human Resources Senior Steering Committee and the S&T Management Development Working Group.

Governance Structure for Science & Technology ((S&T) Management Development

