TRAINING IN THE FEDERAL PUBLIC SERVICE OF CANADA

Staff Development Branch
Public Service Commission of Canada
Canada

1. INTRODUCTION

The federal government of Canada, which employs over 200,000 people through its many and varied departments and agencies, is very congnizant of the fact that a competent workforce is essential for the effective implementation and operation of government programs. As a result, the training policies and programs which have been developed over the years have incorporated the belief that training represents one of the most significant investments as organization can make in its human resorces and, as such, is considered an accepted cost of doing business. To this end, training in the federal government of Canada is structured to achieve the three following objectives:
· to meet the occupational competence needs of the target population;
· to meet the continual need for efficient and effective management;
· to ensure that there is value received for money spent

The intent of this paper is to provide the reader with an overview of the structure of training administration within the Canadian federal government and to more specifically address these three objectives in the context of the Staff Development Branch (SDB) of the Public Service Commission (PSC) of Canada.

2. FEDERAL GOVERNMENT TRAINING IN CANADA

2.1 Roles and Responsibilities

In the Public Service of Canada respoinsibility for staff training is shared between three distinct organizations; namely, the Treasury Board of Canada (TBC), the Public Service Commission (PSC) of Canada, and Canadian federal government departments.

Among other things and as the employer, TBC is responsible for determining the requirements for training and development of personnel in the Public Service and for fixing terms on which training may be carried out. This includes the development, promulgation, and monitoring for compliance of all training policies and procedures. In addition, TBC establishes the service-wide level of proffessional and/or technical competence requirements for various occupational groups and functions; determines service-wide training priorities in

light of government objectives, operational needs and budgetary
considerations; and provides direction to deparments.

Under TBC mandate, the PSC, in addition to its other obligations is
responsible for designing, developing and delivering central training
courses and programs. It is also responsible for providing departments
with advisory and consulting services on training matters; for carrying
out research into teaching methods and training technology, in
conjunction with departments; and for providing training coordination
and related information services to support departments in providing
employees with the training and development needed to perform their
jobs efficiently and effectively.

Departments, as the beneficiaries of training programs, are
responsible for implementing departmental training policies, plans,
practices, control mechanisms, evaluations and audits to ensure that
training of their employees is carried out in an efficient and effective
manner. Departments are required to budget and incur expenditures
related to staff training.

To ensure that government training policies and direction take into
account appropriate information, analyses and expertise, TBC has
created a number of advisory bodies. The Staff Training Council is the
senior interdepartmental committee, chaired by the Secretary of the
Treasury Board. Its main function is to recommend training policies and
priorities, determine Public Service training needs, establish policies
for the certification of trainers and instructors and coordinate the
general staff training programs of the Public Service. In addition, a
number of specialized training boards have been established under the
Staff Training Council—the Management Training Board, the Professional
and Technical Training Board and the Special Needs Training Board.
Menbership in these supporting bodies consists of representatives from
both departments and central agencies, thereby ensuring a high level of
departmental input to decision-making. Please refer to figure Appedix
A for a pictorial representation of the various training roles and
responsibilities.

2.2 General Training Information

In a country as diverse as Canada, training in the federal government
comes in many forms. It is impossible, in such a short space to dwell
on all the types of training offered to federal public servants. Hence,
the next sections will deal specifically on the activities of the PSC
or, more precisely, the Staff Development Branch (SDB) which is the
staff training arm of the PSC. Before discussing SDB, however, it is
worth discussing, in general terms, the training offered to public
servants.

Formal training is provided through many vehicles. Some departments offer their own programs to meet very specific and unique needs. Sometimes such programs are offered as well to employees of other departments. Service-wide training (ie. training that is required across the entire Public Service) is offered by SDB. In many cases, private institutions, universities or colleges better serve the needs of departments; sometimes training needs can best be served by sending employees to training seminars, training symposia, conferences, workshops, etc. In all cases, however, it is government policy that managers link training activities to training plans and to organizational and individual needs.

All training activities must be duly authorized in accordance with policies and procedures, and reported to TBC. TBC in turn has developed a Training Development and Information System (TDIS) which captures and reports government-wide training information. The information from TDIS is intended to do the following: facilitate the management process of planning, implementing and evaluating; monitor training plans ; relate training to performance improvement; and, allow for better decisions to be made with respect to training activities and related costs.

2.3 1983-84 Statistics

In 1983-84, the total cost of staff training in the Canadian Public Service was $221,725,305 of which 47 percent or $104,916,501 was directly attributable to employee participation in training, including trainee salary costs and trainee direct costs, such as tuition, travel and living, and text and material costs. The residual 53 percent, or $116,808,804 related to organizational costs such as planning, development, implementation and control of training, with no direct correlation to individual participation. These included trainer salary, consulting contract, and capital costs.

Five departments, representing over sixty percent of total expenditures, individually spent more than ten million dollars. In addition, TBC and PSC, as central agencies, spent twelve million dollars or about five percent of the total training expenditures These costs were largely incurred by the provision of centrally operated training courses and services offered by SDB and the operation of TDIS by TBC.

In terms of participation in trainig, 185,085 training activities or occurrences were reported for a total of 632,181 person-days in trainig.

(A person-day is the equivalent of one person working for a single work-day). Only five percent of this total was attributable to trainig being taken outside normal working hours. It should be noted that none of these figures include language training instruction data since

language trainig is a separate training activity and is deliberately excluded from this paper.

The number of trainer person-days utilized in 1983-84 was 538,229. These resources directly or indirectly supported the training function through a wide range of activities relating to the management and administration of training and development, implementation and control of training courses.

3. STAFF DEVELOPMENT BRANCH (SDB)

3.1 SDB Description

The Staff Development Branch is an integral part of the Public Service Commission of Canada. It is the central training agency for the Canadian federal public service and is responsible for discharging the training and development responsibilities of the PSC.

SDB provides training in the National Capital Region (NCR) and at urban centres across Canada. It is composed of some 200 administrative and professional personnel including directors, training managers, instructors and consultants and quality assurance and design and development officers.

The Branch operates on a "business basis" within the federal government framework and conducts training and development activities in both of Canada's official languages on a fee-for-service basis with a view of recovering its costs from departments and client agencies. On an annual basis, SDB provides training to over 12,000 participants.

3.2 Background

During the period 1971-72 to 1978-79 SDB encountered numerous problems. Not only did it incur chronic financial deficits during the period, but it also suffered from poor management, deficient operational planning and a vaguely conceived mission which prompted SDB to unsuccessfully be all things to all people. In order to address these problems the organization underwent a thorough review and deliberate changes were made to render the organization more efficient and more effective. SDB's mission was clearly established; the organizational structure was considerably altered with a corresponding reduction in staff size, and a Systems Approach to Training (SAT) was adopted as a means to improve product quality and enhance effectiveness. These actions have proved to be fairly successful in addressing the problems encountered prior to 1980.

3.3 SDB Objectives

The current mission of SDB is to improve the occupational competency of federal public servants to meet the performance requirements of their positions or to better prepare them to assume new duties in response to

Treasury Board policies and departmental demand. To achieve this mission, SDB designs and delivers service-wide training courses and programs, and assists and supports departments to identify and respond to their own training needs.

Underlying this mission are four principles which govern the activities of SDB. They can be summarized as follows:

1. The types of courses designed and delivered by SDB must be directly related to occupational analysis; they must be geared to improve job performance; they must be capable of being validated in the workplace.

2. With the establishment of a distinct clientel, the efforts of SDB must be concentrated on improving the quality of its products and services; that is, SDB does not actively strive to expand its market share.

3. Efforts must be made to achieve efficiencies through increased productivity.

4. Profitability is to be achieved by producing quality products that directly meet the needs of SDB clients.

In recognition of these principles and in the pursuit of its mission, SDB produces an annual strategic plan which covers th upcoming five-year period. The current strategic objective is to achieve by 31 March 1990, and to maintain thereafter, the design an delivery of performance -based programs of training which demonstrably enhance the job competency of 90% of all public service attendees on SDB courses and which deal with those functional areas within the SDB area of training poliy concentration.

With such an objective, SDB must not only concern itself with producing and delivering a quality product. It must also address the ways and means of evaluating and validating its product in relation to how well the product meets the training needs of the public service and also how effective the product is in improving job performance.

3.4 SDB Organizational Structure

As depicted in Appendix B, SDB carries out its activities through the efforts of four divisions which are under the direction of an Executive Director. In addition to the office of the Comptroller, which is responsible for financial planning, systems, accounting and analysis, SDB has three operating divisions, each of which is described below.

Centre for Executive Development (CED)

As its name suggests, CED designs and delivers courses, workshops and seminars for senior managers in the public service.

The majority of its efforts are directed toward provision of mandatory management orientation programs which are offered exclusively

by CED and which are aimed at teaching the knowledge and skills required by senior managers and executives to undertake their managerial responsibilities as effectively as possible. These are residential courses offered at the CED training centre; they range from one, two and three-week sessions, depending on the classification level of the participants. They are intended not only to provide valuable training for public servant managers but also to build up a cadre that supports and assists managers throughtout their careers. Newly appointed managers must begin orientation training within six months of appointment; this training is closely monitored. It is expected that within the next several years, virtually all public service managers will have undergone orientation training, thereby ensuring that the public service will be managed by a professional group of men and women with the requisite knowledge and skills to carry out government programs efficiently and effectively.

In addition, CED offers the Career Assignment Program (CAP), which is an integrated selection, education and development program for middle managers and professional and scientific personnel with executive potential. This program exists to serve the continuing need of organizations for well trained, broadly qualified men and women who can meet the increasing demands of the senior management and executive levels. This eight-and-one-half week course provides valuable training and allows for both the exchange of ideas as well as a better understanding and appreciation of the motivation behind the thinking and actions of others from different environments, be it federal, provincial, municipal or the private sector.

CED also provides a five-day residential course for those people brought into the federal public service through the Interchange Programs of the PSC that allow for the temporary exchange, usually two years, of public service employees with employees of other public or private organizations.

As there is a continued need for training in specific subjects and concerns that are prevalent at any given time, including new management skills, techniques and practices, CED conducts seminars and workshops to meet the ongoing training needs of senior managers in the public service.

Staff Training Directorate (STD)

The training and development needs of public service employees who are not members of the management category, are addressed by the Staff Training Directorate (STD) which delivers its courses at various locations throughout Canada.

Non-residential mandatory management orientation courses for middle

managers and supervisors are offered to those departments which do not have their own courses. In addition, STD designs and delivers courses for specialists in the areas of finance, EDP, material management, auditing, personnel management and training; courses in non-specialist areas necessary to improve the occupational competency of federal public servants are also offered. Details of all SDB courses are included in the Treasury Board's Personnel Management Manual (PMM) Vol. 27. A partial list of courses currently offered by SDB is included in Appendix C.

STD also offers training consulting services to departments. Activities relating to these service include identification of training needs, situation and problem analysis, learning needs identification, learning design, conduct of customized courses, seminars and workshops.

Departments wishing to conduct their own training programs, may therefore, avail themselves of the expertise and resources of STD.

Operations Support Directorate (OSD)

OSD performs a host of activities to support the activities of the other directorates as well as those of the Branch. Some of the major activities of OSD relate to conducting occupational analyses performing tranining validations and undertaking corporate quality assurance activities. These activities will be discussed in the following pages.

Other OSD activities include the operation of a Training Information Centre which coordinates, on a service-wide basis, information services for federal departments in the field of financial, material, and personnel management and electronic data through the use of a computerized data base of training activities offered throughout Canada and the United States. In addition, this centre also provides information and advice with respect to training and development activities and programs offered by SDB.

OSD also carries out research in knowledge transfer methods and training technology in concert with departments and provides service-wide coordination and information services on outcomes of research and currently available technologies and methods.

4. SYSTEMS APPROACH TO TRAINING (SAT)

With the publication of its SAT Manual in March 1983 (and a subsequent revised edition in April 1984) SDB committed itself to a rational means for designing and redesigning all of its courses so that it could successfully achieve its mission and strategic objective. The Systems Approach to Training is the planned grouping and sequencing of training research, development, delivery and evaluation activities. SAT

allows SDB to:

- divide what can be a long, complex process into smaller more manageable units;
- assist non-training management in understanding the process and making training decisions;
- build in the reassessment of usefulness, cost and progress at predetermined checkpoints;
- permit the effective use of specialized staff, facilities and equipment;
- provide a comprehensive audit trail.

As a means to achieve cost-effective training that directly supports work performance SAT also includes the following four prerequisites:

- a policy which commits the organization to use SAT and which defines specific manager's roles and responsibilities.
- a corporate planning process which ensures that major training projects are included in the organization's multi-year operational plans and budgets;
- an audit program that monitors policy compliance;
- access to competent training resources.

As depicted in Appendix D, there are five phases included in SAT; namely, Analysis, Training Design, Evaluation Design, Conduct and Validation. In simple terms, SAT requires management to clearly determine:

- who needs training and which job tasks, with the relevant skills and knowledge, should be included in the training activity (analysis);

- the appropriate training methods and materials, that should be included in the course (design);
- the mechanisms or tests that should be included in the delivery of th course to signify that the appropriate skills and knowledge are being transferred to the course participants (evaluation);
- who should deliver the course; when and where should it be delivered (conduct);
- whether or not job performance has improved as a result of training (validation).

Each of these phases, which are described later in more detail are equally important. By linking training to actual job performance through analysis and validation by ensuring that training packages are designed and conducted in congruence with job requirements, and by evaluating all aspects of course delivery and knowledge/skills transfer to ensure that training objectives are met, the rigorous use of SAT is intended to ensure that SDB courses meet the job-related needs of

departments in a systematic and measurable manner.

4.1 <u>Analysis</u>

The analysis phase of SAT involves the detailed examination of the
tasks of an occupational group or function and the skills and knowledge
required to accomplish job performance. From this analysis of the work,
the work environment and the work force, training objectives and sub-
objectives are formulated. In SDB, the analysis phase is divided into
two discrete activities – occupational analysis and task analysis.
Whereas occupational analysis is concerned with the analysis of actual
job functions, task analysis concentrates on the identification of the
training objectives that ensue from the occupational analysis.

Occupational analysis is accomplished by observation, interview,
information gathering and study to determine both the present and future
requirements of the population under consideration. It is based upon
the premise that it is essential that there be a clear profile of job
incumbents and that there be a detailed picture of what these people
actually do in terms of task, knowledge and skills. Consequently, it is
necessary to administer a questionnaire to a sample popoulation, gather
all the relevant information and, making use of computer programs,
derive a comprehensive list of jobs in terms of related tasks,
knowledges and skills. The initial planning, prior to the release of
the questionnaire requires considerable liaison with the sponsor and
subject matter experts, associations etc. who are most familiar with the
group being analyzed. Since the sponsor is the agent for whom the
analysis is being undertaken, the sponsor must specify parameters of the
analysis. It is critical that the objectives be clarified and expected
results be clearly established. Furthermore, it is most important that
the scope of the study be properly defined.

Once all readily available information has been collected with
respect to the occupational group or function under investigation, SDB
conducts special interviews of one to two hours with a determined
proportion of the appropriate employees. These interviews serve to
verify the initial inventory; capture additional tasks, knowledges and
skills; and, discretely ascertain attitudinal information, organization
problems etc. Once the interviews are completed, this additional
information is used to produce a solid profile of the group under study.

Then a detailed questionnaire is developed which identifies the tasks,
the knowledge and the skill requirements presumed to exist for the
occupation under study. After being validated this questionnaire is
administered to a reasonably large sample of the population under study.
This questionnaire also incorporates an additional comment section and
allows written comments which can be used to add additional tasks or

make comments on any other section of the questionnaire.

The information collected from the questionnaires is analyzed through the use of the computer. SDB uses an EDP software package which was developed by the U.S. Air Force called Task Inventory/Comprehensive Occupational Data Analysis Program (TI/CODAP). With this package, the data is organized and analyzed in various degrees of detail. As a illustration, the questionnaire recently prepared by SDB in its analysis of the Financial Administration Group contained 659 discrete tasks, fifty ability/skill questions and was seventy-two pages in length. In comparison, the questionnaire for the analysis of the management function contained 585 discrete tasks, thirty-five questions and was fifty pages in length. Since the number of variables involved are numerous it is essential that the computer be used to assist in the analysis.

The occupational analysis phase concludes with a report that identifies the structure and job types within an occupational group or function. It also identifies the tasks performed and the population profile for each job at various levels, location etc. The report lists the similarities and differences in these jobs and the various relationships to determine if there is a logical job progression. It also lists weighted data to identify the tasks that require training and it recommends where training should be directed and what tasks should be include/grouped in th e training activiy.

The results of the occupational analysis must be transformed into a manner that allows for their use in training. To this end a project team is created to undertake a detailed anyalysis of the tasks identified in the occupational analysis. From this task analysis, training objectives are developed and supported by the detailed task performance requirements/specifications, the knowledge, skills and prerequisite information and a description of target population.

Task analysis is a most important phase in the SAT process because it establishes the framework and the basis for the specific design of individual course. As a result, it is most important that one or more subject matter experts (SME) be included on the project team. The training objectives, which are supported by clusters of tasks, performance specifications and target population definitions are compared to the existing SDB compendium of courses. A final report indicates major findings and recommendations for new courses or amendments to existing course. These recommendations are directly linked to job-performance as determined through occupational analysis.

4.2 Evaluation Design

An important element of SAT is the continual feedback on how well training is being administered and how well training objectives are being met. As a result, the design of training packages requires that evaluation instruments be incorporated right at the outset. Hence, once training objectives are established, the evaluation instruments to measure attainment of these objectives is paramount and is designed either before or simultaneously with the design of the training packages. Evaluation design therefore, is as equally important as training design and is usually conducted by evaluation specialists.

For SDB, training is a planned learning activity that makes a measurable contribution to the job competency of employees in an organization. The evaluation design phase of SAT produces instruments that assess the effectiveness of training through the measurement of participant performance. In a broad sense, evaluation involves the measurement of efficiency and effectiveness of training activities and the delivery organization. Whereas efficiency is concerned with the maximum number of participants meeting the training objectives in the shortest period of time using minimum resources, effectiveness measures the performance of participants with respect to the standards defined in the training objectives which were determined through analysis. If effectiveness is not measured, the evaluation of efficiency is not particularly significant.

The measurement of efficiency can focus on a wide variety of factors.

The principle factors would include participant selection, participant reactions and perceptions, training technology, instructor presentation techniques, lesson plans and handouts, session and course lengths, administrative systems facilities and equipment, participant and instructor downtime. Although designed for use during course delivery, the methods used to measure efficiency and effectiveness must be carefully planned beforhand. The instruments which measure efficiency continually providevaluable information on the efficiency of the training organization.

The measurement of effectiveness involves more than the common uses of testing to establish grades, marks and ranking; evaluation exercises must provide information that meet the specific needs of those who have a stake in the training. Prarticipants, supervisors and managers, sponsors, trainers and their managers, design and delivery staff are all interested in evaluation exercises that, in addition to meeting training objectives, predict on-the-job behaviour and diangnose performance shortfalls. Evaluation, therefore, is not an end in itself but the basis for a wide variety of decisions.

Evaluation instruments can take various forms that have their own

particular strengths and weaknesses; these include participants' opinions on course content and instruction, paper and pencil tests of factual knowledge, overt observation of full simulation exercises (e.g. role playing, case studies, etc.) and overt observation on task performance on the job. Appendix E lists some of the aspects associated with each of these methods. Whatever the method chosen, however, care must be taken to produce methods that are valid (i.e. a participant demonstrates the required performance under the conditions specified in the training objectives) and reliable (i.e. consistent).

4.3 Training Design

The training design phase is no less important than the evaluation design phase for it is the phase that develops the training package (all training and administrative material) required to conduct a course in accordance with the training objectives. A training package is basically made up of two separate manuals: the instructor's manual and the participant's manual. The instructor's manual includes a course plan, detailed lesson plans, on-the-job training coaches' guides, audio visual productions, technology and exercises, (with appropriate solutions) pre-course reading and handouts, any other supporting material required by delivery staff. It also includes administrative material such as lists of supplies and equipment, descriptions of facilities, joining instructions, course schedules, management information brochures, administrative timetables, and any other supporting material required by administrators. The participant's manual includes only the information which the participant needs to follow the sessions and reference later on.

Training design requires the extensive use of SME's to ensure that all aspects of the design are technically sound. The SME must, therefore, be fully informed on all aspects of the analysis phase and the evaluation phase as well of the training design terminology to be used. The use of SME's is critical in guaranteeing training effectiveness and efficiency.

The use of a project team (which consists of both training designers and SME's) working under the provisions of a project plan and a training plan, is necessary to ensure that all activities are undertaken in consideration of all the necessary elements. Whereas the project plan includes the objectives, the scope, the authorities, the milestones, resource requirements and the profile of the necessary SME's, the training plan is concerned with dividing the training objective(s) into discrete and manageable units from which training packages can be produced.

A training package includes everything necessary for classroom

instructors and coaches to conduct training and the participants to
follow sessions. It begins with the objective and how it will be
measured, an outline of the session, the relationships of the sessions
to previous sessions or participant experiences and the sessions
importance to the course and/or the job. The body of the lesson plan
may vary depending on whether the objective is knowledge based, skilled
based or a combination of both. In any case it will be broken up into
stages covering individual or groups of learning so that the progress
of the participants can be confirmed after each stage by way of
questions, observation, discussion or some other method that is
specified in the plan. Exercises, audio visual material, handouts,
references, pre-course readings etc. are described in the body and
attached to the lesson plan as appendices. The concluding section of
the training plan summarizes the session, provides the participant with
an opportunity to ask questions, evaluates the success in meeting the
objective, corrects any variances and concludes with a statement to link
it with future sessions and, possibly, the job.

Lesson plans must be complete enough to allow an SME instructor to
prepare and present the session without reference to outside material
and they should be presented in a concise style that will encourage the
instructor to make maximum use of personal experience and expression and
prevent reading text directly to participants.

In most cases the training package, along with the evaluation
exercises, are presented as a pilot course so that everything can be
confirmed. Members of the design team do not usually instruct those
sessions that they personally design but they do coach the instructor
and attend the sessions to take appropriate notice of any problem areas.

Corrections are made daily while the experience is fresh. The final
training package and administrative package, once they receive the
blessing of the sponsor, are then ready for ongoing delivery by the
trainig organization.

4.4 Conduct

The conduct phase includes all activities required to present,
administer and evaluate a training course. It may take place either on
the job or in a classroom. On-the-job training is delivered by a coach
on a one-to-one basis using worksite facilities and the actual work to
support the learning process. It is a planned, organized and measured
training and does not identify and correct performance variances
because these are every day supervisory tasks. Classroom training, on
the other hand is usually delivered in groups supported by instructors,
evaluators and an administrative infrastructure. The term classroom is
used in a generic sense to mean a place away from the worksite, which

could range from a meeting room in the same building to sophisticated facilities such as simulated worksites or environments.

In the actual conduct of training, the introduction is a key element in preparing the participant to learn and special care is given to ensure that training objectives are clearly stated and understood and that participants are provided with an outline of the training session.

The structure of the session varies considerably, depending on the type of objectives or sub-objectives and whether the learning relates to task performance or to an environmental factor. The lesson plan provides the learning points and descriptions of the application exercises, demonstrations, checkpoints where learning should be confirmed.

The conclusion of the training session summarizes the points and activities with particular emphasis on those areas where learning difficulties were encountered. Students are encouraged to ask questions and variances in the evaluation exercises should be correcterd.

The conduct phase is the culmination of the previous SAT phases. As the agent directly responsible for the effectiveness fo classroom training, the instructor is usually a subject matter expert in the particular area of training and is also an experienced trainer who can communicate orally in a logical manner. The analysts, designers and evaluators can produce quality products but if the instructor cannot or will not use them, all is for nothing. It is, therefore, essential that there be regular and frequent monitoring for quality control by the delivery organization so that problems can be ascertained and rectified as soon as possible.

4.5 Validation

Validation is the SAT phase that represents the interests of the sponsor and training manager by monitoring the effectiveness of the system. Training is valid when it is sound and well grounded. By observing the "graduates" work performance on the job, validation provides assurances that the abilities learned and evaluated during formal training are transferred and used on the job to pruduce an acceptable level of performance.

In SDB, the Quality Assurance Division conducts validation exercises on behalf of the Branch in accordance with an annual validation plan which is based on the following criteria:

- courses are ranked by their order of importance within the compendium of SDB courses e.g. mandatory, certification;
- only courses which have been designed according to SAT (all of SDB's courses will be designed according to SAT in the next couple of years) will be validated since only these courses have

documentation pertaining to analysis results, training objectives, evaluation instruments, etc;
- courses offerings are sufficient in number so that meaningful samples can be used;
- a minimum population of 40 participants and their supervisors are required to represent an acceptable course sample population;
- the participants who are included in the sample are normally back on the job from 30 to 90 days before validation takes place.

The validation exercise, itself is intended to do the following:
- determine the level of application of courses content and performance improvement achieved by participants upon return to their job;
- identify factors which prohibit or reduce the levels of application and performance improvement;
- identify modifications required to the course design or administration based on participant of supervisor feedback.

By addressing the effects of training back at the job site from the perspective of both the participant and the supervisors the effectiveness of training on improving job performance is directly questioned. The linkages of occupational and task analyses to evaluation and training design and to course delivery is closely examined to ensure that changes are made where required. Validation terminates with a report that identifies corrections required on the application of SAT, provides assurances to the sponsor and other organizational managers of the training quality, and provides useful data to other management systems. Validation is the final phase of SAT and continues to monitor the systems outputs as long as the conduct phase produces graduates. Validation is also the phase that most often is missing in the application of systems to training-a serious ommission since validation assures value and creditability of training.

5. QUALITY CONTROL AND ASSURANCE

In addition to implementing a Systems Approach to Training in the management of its training function, SDB has also created critical decision points where the senior management of the organization reviews the results of each phase of the SAT process and provides direction for subsequent activities. Such reviews take place at the end of each phase of SAT.

Quality Control for the conduct phase is the specific responsibility of the delivery organization i.e. STD and CEDT. This responsibility is met through the regular and frequent monitoring of course conduct. The monitoring of course conduct includes the instructors the directorate

head, the program manager and the instructor's supervisor. Specific instruments are used to evaluate the delivery of course sessions, the use of instructional used to evaluate the delivery of course sessions, the use of instructional techniques and practices, the administration and results of evaluation exercices, etc. All this information is feedback to the appropriate source so that improvements and/or corrective actions can be made where and when required.

Notwithstanding the above and in addition to its responsibilities related to occupational analysis and validation, the Operations Support Directorate assumes a corporate quality assurance/monitoring function and repors its findings directly to the Executive Director. This responsibility is met through the continuous monitoring of the training activities to ensure that they adhere to the principles of SAT and the related SDB policies and procedures. It also conducts and reports on a sampling basis the evaluation and training design phase and the conduct phase of course products.

6. CONCLUSION

With the ever increasing requirements for productivity in the public sector, the need for training assumes greater importance than ever before. In Canada, this need is fully recognized and structures and systems are continually being improved to meet the training requirments of the Canadian federal public service.

The Public Service Commission of Canada, through its Staff Development Branch, has been and continues to be faced with the requirement to provide training that meets the needs of its clients in such a way as to provide them with value for the training dollars they spend, while at the same time, operating a training organization that is efficient and effective.

In the last five years, the Staff Development Branch has responded by taking actions which have increased both its efficiency and its effectiveness. In addition, and probably more importantly, it has adopted a Systems Approach to Training that promises to produce a product that yields value for money spent. By stressing quality of product and by focussing its energies on providing performanced-based training, it is expected that SDB will fulfill its proper role in producing a competent and satisfied workforce in the Canadian federal public service.

MAJOR ROLES AND RESPONSIBILITIES FOR TRAINING
IN THE CANADIAN FEDERAL GOVERNMENT

MANAGEMENT BOARD

SPECIAL NEEDS
TRAINING BOARD

PROFESSIONAL
& TECHNICAL BOARD

GIVES ADVICE

STAFF TRAINING
COUNCIL

GIVES ADVICE

GIVES DIRECTION

PUBLIC SERVICE
COMMISSION
OF CANADA

SETS POLICIES AND PRIORITIES

DESIGNS AND DELIVERS COURSES & PROGRAMS

TREASURY BOARD
OF CANADA

FEDERAL
GOVERNMENT
DEPARTMENTS

TRAINS EMPLOYEES

SELECTS AND SENDS EMPLOYEES
FOR TRAINING

PROVIDES INFORMATION

SETS POLICIES AND
GIVES DIRECTION

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                        │      OFFICER        │
                        │  Public Service     │
                        │    Commission       │
                        │     of Canada       │
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                        │    EXECUTIVE        │
                        │    DIRECTOR         │
                        │ STAFF  DEVELOPMENT  │
                        │      BRANCH         │
                        └─────────┬───────────┘
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│   PERSONNEL      ├─────────────┼─────────────┤  OFFICE OF THE   │
│  COORDINATOR     │             │             │   COMPTROLLER    │
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┌──────────────┐          ┌──────────────┐          ┌──────────────┐
│  CENTRE FOR  │          │  OPERATIONS  │          │ STAFF TRAINING│
│  EXECUTIVE   │          │   SUPPORT    │          │  DIRECTORATE  │
│ DEVELOPMENT  │          │  DIRECTORATE │          │               │
└──────────────┘          └──────────────┘          └──────────────┘
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- Executive Training
- Course Support
- Administration

- Quality Assurance
- Customer Services
- Training Technology
- Training Information
- Policy and Coordination

- General Management Training
- Professional &
     Technical Training
- Regional Training
- Training Consulting
     Services
- Administration

PARTIAL LIST OF COURSES OFFERED BY
THE STAFF DEVELOPMENT BRANCH

Management Orientation
- Management Orientation for Assistant Deputy Ministers (5 days)
- Management Orientation for Executive (10 days)
- Management Orientation for Senior Managers (15 days)
- Management Orientation for Middle Managers (15 days)
- Management Orientation for Supervisors (10 days)

Management Theory and Practices
- Designing Organization Structures
- Time Management
- Project Management
- Managing the Consultant
- Support Staff and Prolems Solving
- Managering Conflict

Informatics
- Introduction to Computers
- Support Staff and Computer-Based Systems
- Introduction to BASIC (FORTRAN, PASCAL, COBAL, etc)
- EDP Systems Analysis and Design
- Design of Outline Computer Systems

Financial Management
- Financial Management Level 1 (II and III)
- Zero-Based budgeting
- Cost/Benefit Analysis
- Professional and Audit Training Program

Auditing
- Internal Audit
- Flowcharting for Auditors
- Statistical Sampling for Auditors
- Conducting the Audit Assignment

Materiel Management
- Construction Contract Administration
- General Level Materiel Management
- Advanced Level Materiel Management
- Purchasing Supply Career Developmente Program

Personnel Management
- Overview of Classification
- Staffing for Managers
- Effective Selection Interviews.Skills
- On the job training and coaching
- Career Planning
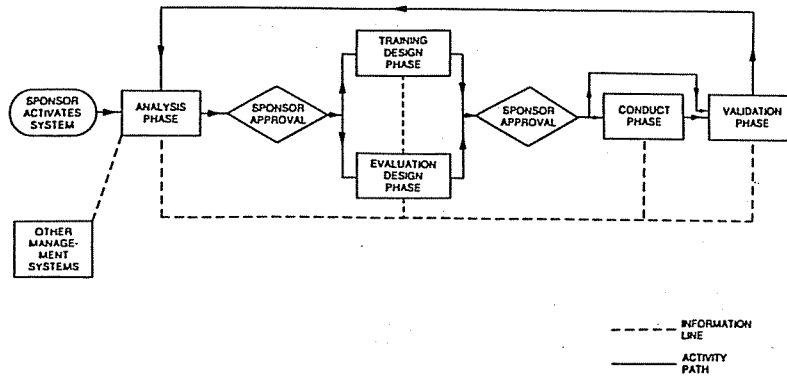- PE & Advanced PE Development Program

Individual Development
- Pre-retirement Seminar for Executives
- Pre-retirement for other employees

Source: Personnel Management Manual. Vol. 27; Treasury Board Canada

SYSTEMS APPROACH TO TRAINING
Prototype Model


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                                                    INFORMATION
                                              -----  LINE

                                              _____  ACTIVITY
                                                     PATH
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**CONTINUUM ILLUSTRATING THE
VALUE OF EVALUATION EXERCISES
IN PRODUCING INFORMATION THAT:**

* Predicts on the job performance
* Diagnoses shortfalls

PARTICIPANTS' OPINIONS ON COURSE CONTENT, INSTRUCTION, ETC.	PAPER AND PENCIL TEST OF FACTUAL KNOWLEDGE	OVERT OBSERVATION OF FULL SIMULATION ON COURSE	OVERT OBSERVATION OF TASK PERFORMANCE ON THE JOB
— Subjective — Variables difficult to identify and differentiate — Inclined to be instructor centred — Presumes participant expertise — Centres on process rather than results — High risk if not anonymous — Indicative of acceptance of the environment — Valid instruments are difficult to design	— Low Risk — Administration time is low — May require test taking competency — Requires subject matter and test design expertise — Encourages ranking — Design costs may be high	— Staging costs may be high — Requires subject matter expertise for design and administration — Administration time may be high — Low risk — High rater reliability — Variables controlled — Administration controlled	— Variables difficult to control — High Risk — Operational demands have priority — Rater reliability is questionable — Highest level of reality and directness of measurement

— 52 —