LEARNING@LARGE:

An e-Learning Guide for Managers

CCMD
Action-Research
Roundtable
on **e-Learning**

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A Letter From The President

Public managers rely on many types of research to stay on top of our constantly changing government workplace. Basic research lays down a solid foundation of understanding by describing and explaining the world in which public managers live. Applied research adds a practical edge by drawing out the decision-making implications of research findings. Action research takes this practicality a step further. It provides timely and concrete advice to pressing challenges; advice that speaks to managers' lived experience. It does this by involving managers at every stage of the research process. In short, it aims to take inquiry out of the research shop and move it onto the workplace floor — a key feature of a Public Service organization that learns.

This guide comes from CCMD's third wave of Action-Research Roundtables. This year our discussions with managers brought to light three research areas:

- Crisis Management;

- e-Learning; and,

- Official Languages in the Workplace.

These topics relate directly to the day-to-day challenges managers face and are of strategic importance to the Public Service as a whole.
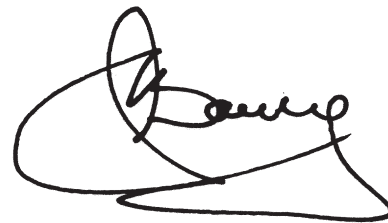
This manager's guide on e-learning is the result of the Action-Research Roundtable on e-Learning. It fills a major gap by providing a public sector perspective, since most of the literature is dominated by the private sector perspective. This guide also builds upon the work of others within the Public Service of Canada. It has been designed to complement the Public Service's Campusdirect e-learning system, and to further the goal of the Deputy Ministers' Learning & Development Committee to create a Public Service Learning Organization. It is an ideal companion to the CCMD guide to the learning organization entitled The Learning Journey.

I am confident that you will find this guide a path-breaking contribution to our on-going journey to make the Public Service of Canada a workplace where people thrive and an institution recognized for its value-added to Canadian society.

I would like to thank the Roundtable's Chair, Alain Jolicoeur, Deputy Minister of the Department of Indian and Northern Affairs, for his commitment and leadership. I also applaud the invaluable contribution of the Roundtable members who volunteered their time and expertise because they believed in the importance of learning and of e-learning. Finally, I would like to thank the Roundtable Secretariat members for their diligent research and inspired composition.

Jocelyne Bourgon

President,
Canadian Centre for Management Development

CONNECTING TO E-LEARNING

Learning is recognized as an essential element in the renewal of the Public Service. Continuous learning will affect our ability to recruit and retain the talent required to provide quality services to Canada and Canadians. Given the constant evolution of business demands, it is evident that learning strategies must fully maximize all learning opportunities including those that technology offers.

When I was asked to chair the Action-Research Roundtable on e-Learning, I saw it as an opportunity to assist managers in making informed decisions about learning investments. Intelligent investment choices are especially critical given the fiscal context within which services and learning must be managed. While e-learning will not be the appropriate solution in all instances, it represents a flexible option within a variety of learning tools. The value of e-learning is the sum of its ability to save money, increase accessibility, and be available to anyone at any place and any time.

The development of the Public Service as a learning organization is a multi-faceted undertaking, still very much in its formative stages. However, it is already clear that only learning organizations will excel in the new public administration that we seek to create. Many aspects of building the tools and culture are currently being explored, and on our way to becoming a learning organization we should remind our managers that e-learning is an interesting ingredient that they should not overlook. It is hoped that this document will help you make wise choices to facilitate and support the learning and development of your staff.

Finally, I would like to thank the Roundtable members whose invaluable experience and perspectives helped clarify the role of e-learning within the larger learning agenda of the Public Service.

Alain Jolicoeur

Deputy Minister, Department of Indian and Northern Affairs

and

Chair, CCMD Action-Research Roundtable on e-Learning

E-LEARNING IN BRIEF

EXECUTIVE SUMMARY

THE NATURE OF E-LEARNING

e-Learning—the acquisition of knowledge and skills through the use of electronic information and communications technology—is appearing throughout the Public Service under various guises: as Web-based courses, tutorials in electronic discussion forums, video-conference lectures, to name just a few. This approach to learning has become a mainstay of modern professional development that is becoming integrated into the way we work; it is, to employ a pun, learning "@large".

e-Learning embodies a new philosophy of what it means to learn. This involves two fundamental changes. First, e-learning puts unprecedented control into the hands of the learner in order to tailor lessons to a person's unique characteristics and circumstances. In other words, it is more "learner centred". Second, e-learning strengthens the relationship between learning institutions and the workplace. People no longer make a clean break from school to work but, instead, engage in lifelong learning. e-Learning makes this continual learning more viable. It also offers a host of possibilities for building an agile workforce with skills aligned with the achievement of organizational goals.

THE CASE FOR E-LEARNING

The specific benefits of e-learning make the building of a business case somewhat straightforward. There are seven marquee benefits. The speed of delivery and flexible start times of e-learning help learners acquire knowledge and skills "just-in-time", instead of "just-in-case". e-Learning can scale up and down to accommodate the number of learners available with relatively

little fuss. e-Learning's "anywhere, anytime" access offers the flexibility to match the diverse and complicated lives of the modern worker. Although an e-learning course may have the same price as alternatives, if looked at holistically, it can be more cost effective because of the costs it saves (such as travel expenses). e-Learning improves access, both regionally and for those with particular physical disabilities. New modes of learning are made possible by e-learning's multimedia capabilities. Finally, these multimedia elements can be used to spice up otherwise dry learning material.

The Canadian Public Service has made extensive investments in e-learning. Perhaps the most important of these investments is the new government-wide, single-window delivery, e-learning system: Campusdirect.

MANAGING THE E-LEARNING PROCESS

The process of leveraging the power of e-learning comprises a number of steps involving an on-going dialogue between managers, their staff, and other support professionals (particularly learning and information technology staff). The process requires that managers actively cultivate learning within their organizations by inspiring staff to learn.

The process begins with planning in which personal learning and organizational learning needs are assessed through learning plans. Not all learning needs can be accommodated right away and so some prioritizing takes place, by necessity. Once learning priorities are decided, it is necessary to select the right mix of learning approaches, creating a basket that may include e-learning, traditional, and blended approaches. Prospective

learners then act as "informed consumers" and select quality e-learning solutions. During the learning process, managers must play a support role to ensure follow-through and make sure that learners do not become victims of various pitfalls and obstacles. Finally, progress towards learning goals needs to be evaluated before the process begins anew. This guide offers advice on all of these counts to varying degrees.

When selecting e-learning solutions, care needs to be taken to ensure that learners will get the most from the experience. Watch out for learning packages that merely recycle material from traditional methods, are not easy to use, and offer more bells and whistles than appropriate functionality. Good e-learning solutions cater to an array of learning styles and help learners track progress towards goals.

ENSURING SUCCESS

Experience suggests that there are a number of factors that can help ensure success. Management support of learners and promotion of e-learning opportunities is key. By taking small steps towards integrating e-learning into workplace routine, one can smooth out the transition and minimize exposure to risk. Blended learning solutions should be sought out, especially for those staff members who are unfamiliar with, or daunted by, technology. Learners should be encouraged to bring along a buddy in order to stay motivated, jointly solve problems, and exchange ideas. Managers should provide access to the right technology and learning space within the workplace. There are several types of e-learning spaces that managers can make available to their staff. Computer training is suggested for those with limited computer skills. Technical assistance

should be handy for when the odd technical glitch occurs. Involvement of all relevant stakeholders is necessary to ensure that the right goals are set and the technology works as intended.

There are a number of pitfalls that need to be guarded against. Lack of support and accommodation can result in drop-out. Bad experiences early on can turn people off of e-learning. If learners do not see learning as relevant to their job or occupation, they may just go through the motions. These require interventions on the part of the manager who, at different times, plays the role of champion, coach, and teacher.

There are a variety of ways to track learning progress, including: having learners provide briefings of lessons learned, accounting for competencies and credentials acquired by maintaining a learning dossier, and using measurement indicators.

INTRIGUING APPLICATIONS

The guide wraps up by illustrating how e-learning works in practice by looking at two areas for which it is ideally suited. The first area is official languages e-training. e-Learning's multimedia capabilities, continual linkage with learners, and distance learning capabilities have inspired a number of interesting cases. The second area is employee orientation training. e-Learning's ability to start at any time, teach standardized and dry information in an interesting way, and tailor learning to fill knowledge gaps makes it an ideal orientation training tool.

A CRASH COURSE IN E-LEARNING

The Rise of e-Learning

Wherever one looks these days, there seems to be another example of how new technologies fundamentally change the way we work and live. It should come as no surprise that electronic information and communications technologies, the Internet in particular, are also transforming the way we go about learning. Students are now eager to sign up for on-line courses, engage in distance learning through video-conferences, exchange ideas in electronic discussion forums, and download learning materials from the Web. They are *e-learning*, an approach to acquiring knowledge and skills that has become a mainstay of modern professional development.

This is your crash course on the subject. You will learn why e-learning has become so popular and how it affects you as a public manager. Before jumping on the bandwagon, however, there are a few things you ought to know about what this form of learning is and what it is not.

- *e-Learning is a fully fledged approach to learning, not just a set of technologies.* Technology is an essential ingredient but it is not the entire recipe. E-Learning is an encompassing approach to learning, one with distinctive teaching techniques and learning materials. It is a way of learning that caters to a wide array of learning styles and draws on certain personal disciplines.

- *e-Learning complements other approaches to learning.* Like other technology-based solutions, it is often over-sold as a panacea. This is counter productive for inflated expectations tend to lead to disillusionment, with widespread cynicism

E-LEARNING DEFINED

E-Learning is the acquisition of knowledge and skills through the use of electronic information and communications technology.

It can be used in support of individual, organizational, or public service developmental objectives.

LEARNING MEDIA

E-Learning can be enabled with a wide array of technology. Some of this technology provides access to learning material to you at a single point in time (it is "asynchronous"). Other technologies facilitate two-way interaction with others (it is "synchronous").

Networks

The most popular e-learning solutions are available through electronic networks of various kinds: the Intranet, organizational intranets, enterprise-wide extranets, or newer wireless networks.

Telecommunications

Canada's telecommunications infrastructure can give instructors a virtual presence across vast distances, often to isolated locales. Technologies include television and radio broadcasts, plus video conferencing.

Portable Media

Not all e-learning takes place "on-line". One can use audio tapes, video tapes and disks, and potentially more interactive storage media, such as CD-ROMS, DVDs, and floppy disks.

Dedicated Appliances

Flight simulators and other specialized e-learning tools can rely on specially designed computer appliances.

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the ultimate result. The truth is that each mode of learning, such as classroom learning, self-directed study, and apprenticeship, has its strengths and weaknesses. Even though e-learning is a rich approach, is no different in this respect. Ideally, e-learning should be one of many approaches taken: it can bestow lessons that other approaches can not; it may not bestow lessons that other approaches can; and it can augment and reinforce lessons learned elsewhere. Likewise, e-learning can be combined with other approaches to be made more effective in a *blended* (or *hybrid*) approach.

- *e-Learning, like other forms of learning, must be actively cultivated.* If you build it, they will not necessarily come. People learn best if they have some guidance, support, and encouragement. Organizations, including the managers who steward them, are responsible for promoting a culture of learning in which people are *inspired* to learn. Some liken this responsibility to that of a gardener tending a garden; one can not force anything to grow, the environmental conditions may not even be ideal, but one can provide the nurturing that is most likely to produce growth.

After reflecting upon these characteristics, one gets the impression that e-learning is certainly more than an amalgam of technologies. Likewise, it is more than just a wired-up version of traditional approaches to learning. E-Learning embodies a *new philosophy* of what it means to learn.

- *The learner gains greater control over the learning process and, as a result, learning is better tailored to that person's unique characteristics and circumstances.* Within a classroom, a teacher is usually compelled to design the curriculum to cater to a broad cross-section of student interests, aptitudes, and needs. There are limits within which the material can be customized to suit each learner, especially in mass lectures. This adds to the risk of students becoming disengaged and passive recipients of information, instead of being actively engaged within a stimulating learning experience. E-Learning differs by placing greater control in the hands of the learner and being more sensitive to individual differences (it is "learner centred", to use the educational jargon). This allows the learning process to better cater to individuals' preferences and predispositions towards acquiring knowledge and skills

(that is, their *learning style*). A great deal depends upon the way a particular e-learning solution is designed, for badly designed courses can turn the learning experience into rutterless Web surfing. Nonetheless, e-learning solutions are increasingly being built, from the ground up, with high levels of learner control. Ideally, a blended approach is used to provide the best of both worlds: customized e-learning frees up teachers to concentrate on the needs of those who need it most, adding a human touch in the process.

- *The relationship between learning institutions and the workplace becomes stronger.* Today, members of the labour force no longer make a clean break from school to work but, instead, periodically upgrade skills to maintain competitiveness within the labour market. This is known as *lifelong learning*. At the same time, organizations can not readily afford to continually send employees to school for extended periods of time. E-Learning blurs the boundaries between the school and the workplace by better integrating the two. The opportunity exists for learning to become seamlessly interwoven into a person's work schedule. Curriculums can be more readily designed to reflect organizational priorities and goals, becoming more relevant in the process.

The larger point is this: e-learning makes it possible for continual growth to take centre stage in a person's worklife and an organization's evolution. Yet, just because it is possible does not guarantee that it will happen. It is crucial that managers engage their employees in a dialogue to assess learning needs and present options.

The e-Learning Payoff

Making the case for why e-learning is a worthwhile approach becomes relatively straightforward once the benefits are spelled out. There are a large number of tangible benefits that affect you and your organization's bottom line. In short, e-learning sells itself.

- *E-Learning enables the "just-in-time" acquisition of knowledge and skills.* One does not have to wait until the beginning of a semester or course in order to start the learning process. E-Learning can begin at the click of a button. One does not have to follow along at the pace of fellow learners or a pre-arranged

TYPES OF E-LEARNING

Keeping track of the numerous e-learning solutions on offer is enough to make one's head spin. Fortunately, most can be corralled into a relatively tidy set of categories.

Self-directed

These "self-serve" solutions place the learner firmly in the driver's seat. Material can be presented in a way that suits learner wants and is paced at the learner's convenience.

Instructor-led

Courses may take place on-line that offer guidance from an instructor, as in the case of web-cast courses and discussion fora.

Virtual Classroom

Classrooms can be linked together through audio and/or video teleconferencing systems to create a highly interactive learning space that transcends distance. Classes can also be "wired up" in a way that links together computer technology placed on the desks of students residing in the same venue.

schedule. E-Learning unfolds at the pace that best suits the learner: one is free to pause on a topic that is particularly interesting or challenging, or breeze through the material that is old hat. In sum, knowledge and skills can be acquired as the need arises. Otherwise the learner tends to build up a knowledge base that, if not put to use, will degrade over time. This "just-in-case" learning results in under-utilized knowledge and skills and, when lessons are applied, they will probably not be as sharp or up to date.

- *E-Learning scales to accommodate the volume of learners an organization needs trained*. A critical mass of learners does not have to come together before a class becomes viable. If only one person needs the learning, then only one person is all it takes to trigger the commencement of a course. Likewise, e-learning can accommodate large numbers of learners, including unanticipated surges in training demand. In a classroom environment, class sizes are constrained by the number of seats available. Teachers can not be cloned to create new classes at a moment's notice. Yet, with e-learning, it does not matter if one hundred or one thousand students sign up for a course at one time. So long as the technological infrastructure can handle the extra traffic, the learning will take place.

- *E-Learning offers the flexibility to match our diverse and complicated lives*. Some characterize this as "anywhere, anytime" access. This might be a slight exaggeration, but only a slight one. You can theoretically engage in e-learning at any location where you can take a portable computer. This is particularly handy for those who use alternative work arrangements or want an occasional change of scenery (a favourite café, perhaps). This approach to learning can also occur at anytime. This allows previously neglected groups of public servants, such as shift workers, to have access to learning at awkward times of the day. Most importantly, this feature of e-learning helps accommodate busy schedules with minimal interruption of work. The word "helps" is operative here because a learner's supervisor will have to co-operate to make sure that learning is not pushed into coveted leisure time. If need be, e-learning can take place in the margins of the workday.

"e-Learning unfolds at the pace that best suits the learner, scales to accommodate large numbers of learners, and affords virtually 'anywhere, anytime' access."

- *e-Learning is more cost-effective than many other options*. This does not mean that an e-learning course will cost less than an in-class course. The purchase price might actually amount to more. This should not be entirely unexpected, after all, there are a lot of up-front expenses that go into the development of a high quality e-learning program. If you look at the issue of cost in a more holistic way, however, you will find that e-learning is usually more competitive. For example, you may save on travel expenses, time away from work, and learning materials (such as text books). In the final analysis, e-learning offers managers a way of better focusing training and development budgets on actual learning activities instead of overhead. This is particularly important when fiscal conditions tighten because training and development budgets are often the first items to be trimmed in the name of fiscal austerity.

- *e-Learning offers higher levels of access*. Those who reside in a locale that is off the beaten path have probably noticed that learning opportunities are not that plentiful. Public Service training and development institutions have made great strides in improving services to all of Canada's regions. The fact remains that most training tends to happen in major urban centres. e-Learning transcends distance, making it a popular method of distance learning (and an improvement over paper-and-pen correspondence courses). This means improved access to public servants working abroad, too. Moreover, e-learning affords new opportunities to those with physical disabilities. For example, the burden of moving to a different location to learn may pose a barrier to someone who relies on a wheelchair. Those with visual or hearing impairment may find e-learning advantagous. Access may not be improved for all members of these groups but, if designed properly, e-learning contributes to a more equitable learning system.

- *e-Learning enables new modes of learning*. The multimedia capabilities alone open up new opportunities to instill lessons using graphics, video, speech, and immediate feedback. A wide array of learning styles can be accommodated by these media elements. Simulations offer the ability to practice newly acquired skills. In a similar vain, e-learning can create *safe*

TOP BENEFITS

According to survey evidence, employers and employees value e-learning for slightly different reasons. Here is how the most important benefits ranked.

SOURCE: Conference Board of Canada.

Employers

1. "Just-in-time" learning
2. Cost-effectiveness
3. Improved employee control over learning

Employees

1. "Anywhere, anytime access" (two items: can be used any time and convenience)
2. Provides relevant learning
3. Control over learning.

spaces in which to learn. Some find learning in public groups to be intimidating; they are afraid to fail and lose face. Others do not feel comfortable speaking up in group conversations, especially those that are dominated by a vocal few. Within on-line discussion forums, these same people may be able to lose their inhibitions and actively engage others in dialogue and other forms of collaboration.

- *E-Learning can spice-up otherwise dry material.* Some material can be difficult to learn because it is highly technical, specialized, or detailed. Some subject matter does not hold the same intrinsic appeal for everyone. e-Learning can make learning more stimulating by making it interactive and sensitive to different aptitudes and interests. The non-linear way that material is often presented can help us make connections between new knowledge and the knowledge one already has. Cognitive psychologists consider this to be the essential ingredient of highly productive learning.

These are some of the marquee benefits from which a persuasive business case can be fashioned.

The e-Learning Public Service

Learning does not take place in a vacuum. Learning is tied to a larger purpose, such as fulfilling personal or professional aspirations, organizational objectives, and Public Service-wide priorities. In this era, learning is increasingly seen as a way to cope with our rapidly changing governance environment. For example, the knowledge intensiveness of work is growing. The impending retirement of a large wave of public servants, coupled with the swift ascent of a cadre of young workers, raises the prospect of a major skills gap in the absence of learning investments. Moreover, peoples' knowledge and skills can not simply be "mined" if an organization wants to build a sustained capacity, it must be continually replenished.

For these, and many other reasons, learning has been a strategic priority within the Canadian Public Service for the last decade or so. The Deputy Ministers' Learning and Development Committee has taken a lead role in advancing this learning agenda. Many accomplishments have resulted but the fact remains that learning is demanding and a substantial investment of resources is

"Public Service learners told us they would like access to a single on-line learning resource that integrates the services of learning providers across the Public Service and covers a much wider range of topics."

— *Deputy Ministers' Learning & Development Committee*

required. In times of scarce resources, learning investments are all too often jettisoned as a short-term budgetary fix. In many organizations, learning funding is the first to go even as the overwhelming need persists.

This has inspired a new way of thinking about how ones goes about learning in the Public Service. E-Learning is at the forefront of this rethinking. The benefits mentioned above make it a particularly alluring alternative to traditional approaches and program offerings. It is no coincidence that some departments and agencies have placed their confidence in e-learning. For example, the Canadian Centre for Management Development's (CCMD) Campus E program offered more than a hundred on-line management courses (or "clinics"). These are designed to cater to a cadre of public servants who face particularly heavy workloads and skill demands. Overseas workers are disadvantaged by a dearth of learning opportunities that speak to their unique work lives. Accordingly, the Department of National Defence and the Department of Foreign Affairs and International Trade have created e-learning programs to help overcome this challenge. The Treasury Board of Canada has also set up a Public Service-wide e-Learning Network to help spread the word and share good practices.

This frenzy of activity begs the question: is there a more comprehensive design to e-learning in the Public Service, one that integrates the various initiatives into a coherent whole? The answer is "yes". It goes by the name Campus*direct*.

Plugging into "Campusdirect"

The rapid growth of e-learning poses a number of challenges to a Public Service in which the administration of learning is decentralized. For one, the sheer number of courses and programs available from both inside and outside government can overwhelm those who are looking for e-learning opportunities. Where do you begin to look? How do you ensure that you have not overlooked a particularly promising course? How do you compare offerings? Answering such questions can consume enormous amounts of time unless some guidance is at hand.

The ideal way to deal with this challenge is to offer "single window" access; one place where potential e-learners can find what

CAMPUS*DIRECT*

Campus*direct* offers three different "families" of services.

www.campusdirect.gc.ca

Learning Portal

The learning portal offers a comprehensive repository of information on learning opportunities. As such, it operates as a gateway to learning. It also includes a suite of on-line self-assessment tools to, among other things, help you develop learning plans.

e-Learning Library

This library is a treasure trove of learning products—both off-the-shelf products from commercial sources and custom made sources—providing knowledge and skills that will be beneficial to the Public Service as a whole.

e-Learning Infrastructure

Campus*direct* provides a robust foundation upon which e-learning can take place. This infrastructure can help you manage learning plans, keep track of learning progress, and deliver e-learning courses.

they are looking for instead of burdening themselves with the task of searching far and wide. This does not mean centralizaton. To the contrary, such an approach could simply corral all the information about what is available and point people in the right directions. Many public services are adopting this approach in order to better serve their citizenry.

The Government of Canada's Campus*direct* provides this single-window for Public Service e-learning opportunities. The Network of Learning and Development Institutes—a forum composed of the Public Service's learning and development institutions—established this Web-based centre to help us discover and take advantage of the diverse e-learning opportunities on offer.

Building bridges between teachers and learners is only the beginning. Campus*direct* offers a suite of learning resources to serve both organizational and individual needs. As a manager, you may want to use Campus*direct* to establish an e-learning strategy or track your staff's learning progress. As an individual learner, you can get help developing personal learning plans, peruse the library of materials (such as guides and self-assessment instruments), find the specialized e-learning options you need, or take a course directly from Campus*direct*. Once Campus*direct* matures, a comprehensive suite of on-line learning materials will be found there.

The e-Learning Journey

Just because e-learning is flexible and convenient does not mean that it is effortless. As with all learning endeavours, it requires commitment and discipline to stay the course. It is only one part of a larger journey of reflection, self-discovery, and intellectual growth—a journey that never really ends. As a learner, there is a process you go through to assess your learning needs, as well as those of your organization, and select a set of learning activities that is right for you. This guide will help you take these steps.

There is also an element of leadership involved in adopting e-learning solutions. As a manager, you are counted on to engage and motivate others to learn. Realistic expectations and achievable goals need to be set. Some coaching is required to maintain momentum and follow-through, especially in the face of adversity. Here, too, this guide will offer you assistance.

"Just because e-learning is flexible and convenient does not mean that it is effortless. As with all learning endeavours, it requires commitment and discipline to stay the course."

This learning journey is not to be taken alone. Public Service departments and agencies have learning professionals to offer guidance and support. E-Learning tends to require some technical support to find out what solutions are viable and take steps to correct technical problems. The information technology staff within your organization should, therefore, be involved in the processes, too. These are particularly important points because, although this guide attempts to put forth a fulsome introduction to the topic, it may not answer all your questions. This is another area in which your local learning and technology professionals can offer a helping hand. Given the rapidly evolving state of e-learning, they will likely be able to keep you up to date on the latest developments in the field.

What follows is a collection of tools and tips to help you figure out where e-learning can help you and how you can best take advantage of this approach. The next page illustrates the six major stages involved when adopting an e-learning solution: (1.) planning to determine learning needs; (2.) prioritizing individual and organizational learning needs; (3.) figuring out what is the right mix of learning approaches, be they electronic or not; (4.) selecting the e-learning solutions that are appropriate and the best value; (5.) supporting staff to ensure that they make the most of the learning experience; and, finally, (6.) evaluating the learning experience so that improvements can be made the next time.

The next two sections of this guide will offer advice about how to proceed within these stages. The guide will then illustrate some of the advantages and practicalities associated with e-learning by discussing some areas in which e-learning is especially well suited—namely, official languages training and employee orientation. It is hoped that this advice will provide a stepping stone in your on-going attempts to leverage learning opportunities to their full potential.

SIX STEPS
IN THE RIGHT DIRECTION

Every journey begins with a few early steps. The journey down the path towards more effective use of e-learning starts with six of them. These steps tie e-learning activities to personal and organizational goals. They also underscore who needs to be involved in order to maximize the likelihood of success.

PLANNING

The first step is an assessment of personal learning needs (an individual learning plan) and organizational knowledge and skills gaps (organizational learning plan). Learning personnel should be involved to ensure that everyone is moving in the right direction.

PRIORITIZING

Realistically, not all learning goals can be accommodated right away. Priorities must be identified. These are learning activities that accommodate both career aspirations and organizational capacity needs. This should be done through a dialogue between managers, staff, and learning professionals.
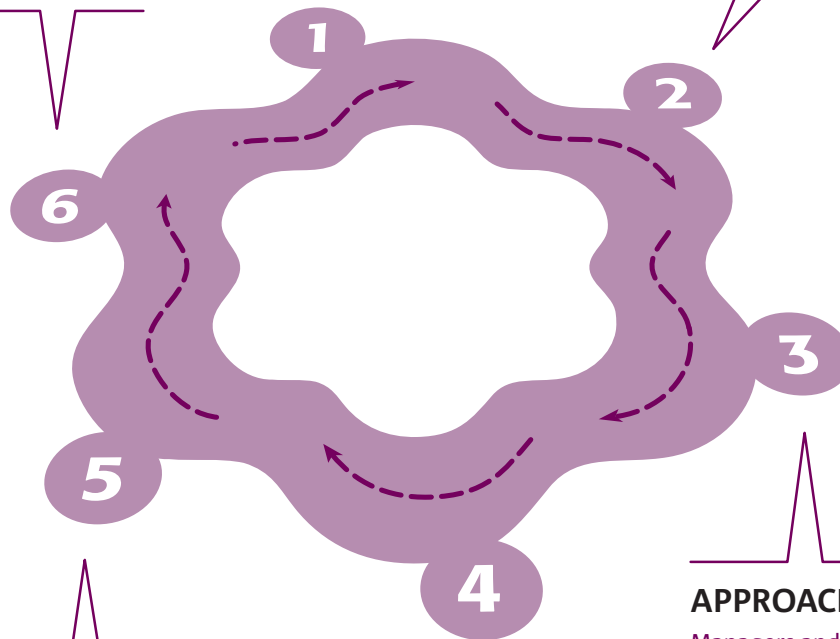
EVALUATION

A debrief of what was learned takes place. Interesting lessons are shared with colleagues. Accomplishments are assessed against (individual and organizational) learning plan objectives.

APPROACHES

Managers and learning professionals should educate staff about the benefits and weaknesses of the various learning approaches. An assessment is made about what learning is best taken through traditional, e-learning, and/or blended approaches. Information technology (IT) staff should be involved to make sure options are technically feasible.

SUPPORTING

As staff engage in e-learning, managers offer support to ensure follow-through and make sure that learners do not become victims of various pitfalls and obstacles.

SELECTION

E-Learning solutions are selected with the support of IT staff. Campus*direct* is a good place to begin the selection process.

PLANTING THE RIGHT SEEDS

Means of Engagement

Y ou are committed to your intellectual growth and that of your staff. You have also accepted that classroom-based training is not the default method of learning. If this is true, then you might rightly ask: so what comes next? The process that follows is not as easy as point-and-click. There is some preparation that should take place before you sit down in front of a computer.

This section will help you make these preparations and select the mix of learning activities that works for you. It all begins with understanding what your learning needs are. Learning plans are a particularly useful method of identifying these. There are two types to consider.

- The *organizational learning plan* weds learning activities with the business objectives of your work unit. Every team, every branch, every department has a set of capacities that must be cultivated if key objectives are to be achieved. Each capacity is based on individuals' knowledge, skills, and abilities, performed at a high standard; that is, individuals' *competencies*. Competencies are the building blocks of any learning plan. Composing a learning plan revolves around identifying the competencies you need, assessing the deficiencies within your team, and seeking out the learning opportunities that fill the gaps. This is not conducted by a manager in isolation. One person usually does not know the demands placed on all staff members. This is a team exercise whereby managers engage their staff, and in some cases their representatives and learning professionals, to assess learning needs.
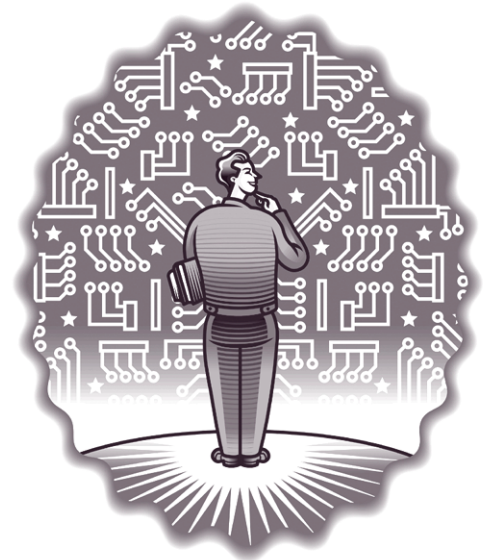
LEARNING PLANS DEFINED

An **individual learning plan** is a systematic method of aligning future learning activities with an individual's needs, interests, career aspirations, and learning style.

An **organizational learning plan** is a method of identifying and forecasting an organization's learning needs, as well as the steps that need to be taken to ensure that these needs are fulfilled.

- Not all learning takes place at the behest of the organization. Each of us has interests, enthusiasms, and career aspirations that should be considered. This is where a *personal learning plan* fits in. This plan links a person's career goals with a list of competencies to be attained. Many professions within the Public Service have pre-existing lists of competencies that can be drawn from. During this process it is vital that you regard the staff member as someone with a diverse set of responsibilities and time constraints, such as those which originate at home. In other words, people are treated as "whole persons". The resulting learning needs are matched up with available opportunities.

Departmental learning professionals usually have a wealth of information about how to use learning plans to assess needs. Campus-*direct* offers information on the topic, as well.

It would be a mistake to assume that both organizational and individual learning plans will be entirely consistent. Individuals usually have career aspirations that reach out beyond the confines of a particular team. Trade-offs need to be made to accommodate both sets of learning needs. It is after individual and organizational needs are aligned that the process of selecting learning opportunities begins.

Matching learning needs to learning opportunities is a challenge in itself. The goal is to create the right mix of traditional, e-learning, and blended solutions which suit both the learner and the larger team. If learning is to become a routine fixture within the workplace then it needs to be blended into the rhythms of that workplace. The savvy e-learner also knows the strengths and weaknesses, myths and realities, bargains and lemons of e-learning. What follows is a handy guide to each.

The Right Stuff

It is worth stating up-front that there are some fundamental "do's" and "don'ts" associated with e-learning. Do not let e-learning be written off based on faulty perceptions or bad experiences. Do encourage others to experiment with e-learning, but do not oversell it and get too fixated with the technology. Do be sensitive to each person's different learning needs and styles. Do not force feed e-learning on others, for it is not for everyone in every situation.

Where does e-learning shine and where does it not? The answer is not as straightforward as you might think because we are only scratching the surface of the potential applications of this approach. Moreover, e-learning has proven itself to be surprisingly flexible and adaptive when artfully applied. This said, there are types of material, learners and environments for which e-learning is best suited.

- **Types of Lesson.** If the learning objective is to convey information, raise awareness, instill and practice basic know-how, then e-learning is usually an ideal option. e-Learning can enliven highly descriptive information and illustrate how complex things work using a variety of visual aids. It is well suited to standardised material and honing basic skills, such as a flight simulator used by pilots. On the flip side, there is some materials that are more challenging to translate into an electronic form. Dialogue and interaction that involve deep interpersonal engagement (they are "high touch") often works best when there is some face-to-face contact, something which is easier to produce in-person than through electronic mediation. Apprenticeships, and other forms of experiential learning that require prolonged periods of learning-by-doing, are usually only partly amenable to e-learning because they involve communicating tacit (i.e. difficult to articulate) forms of knowledge through first-hand observation and hands-on trial-and-error. Other types of learning that usually require some blending with traditional approaches include mentoring, coaching, and action-learning, all of which require the steady development of interpersonal rapport and trust. This does not mean that technology can not play an important role, but it is usually not centre stage.

- **Types of Learner**. Some people find technology frustrating, or they spend most of their workday staring at a computer screen and have had enough of it when it comes time to learn. There are those who learn best in the company of others within a seminar discussion or need the careful guidance that only comes with one-on-one tutoring. Add to this litany persons with certain physical or learning disabilities who are disadvantaged in using some technologies. All of these types of people may have legitimate grounds to decline an invitation to take part in e-learning, but one should ensure

"Some people write off e-learning before they have tried it (or because of a single bad experience). This type of reluctance should not be considered a suitable excuse to not use e-learning solutions."

that these are not unduly used as excuses not to try e-learning. After experiencing the right e-learning solution, many people discover that it is an ideal solution to their learning needs and style.

• **TYPES OF ENVIRONMENT.** The Public Service is a collection of diverse work environments. In many offices security is an over-riding concern.

FAQs

FREQUENTLY ASKED QUESTIONS

E-Learning can sometimes be difficult to fully grasp: it is diverse, constantly evolving, partially shrouded by technology's mystique, and accompanied by its own technical terminology. Few have first-hand experience with e-learning and, for some, there is a reluctance to try something new.

It is for these reasons that there is a need to educate potential e-learners. Such a task is complicated by the fact that many managers do not have much, if any, exposure to e-learning either. To overcome this problem, this section answers a number of the most frequently asked questions about e-learning.

Q How does e-learning relate to more traditional approaches to learning?

A Just as classroom learning did not replace book learning, e-learning does not completely replace classroom learning. A particular e-learning offering may be an improvement over more traditional options, but this is not necessarily the case. In all likelihood, fulfillment of your developmental needs will require a variety of learning approaches. It is also true that e-learning can work best if it is blended with other forms, such as in-person instruction.

Q How much money can I save if I invest more in e-learning for my staff and I?

A Many of us have come to expect that information technology reduces the cost of doing things. It is important to keep in mind, however, that the cost of developing an e-learning infrastructure and worthwhile course content comes at a heavy price. This is reflected in the price of e-learning courses. You are more likely to save on the costs that surround learning, such as the cost of travel and time away from the office. These things vary considerably from person to person, making it impossible to come up with a universally applicable estimate.

Q In what ways does e-learning differ from your average Web site?

A At the outset, it should be acknowledged that e-learning can use many different types of electronic media, not simply those associated

Access to the Internet and portable computers is, therefore, restricted. If you work on an ice-breaker in the High Arctic, a border post on the Prairies, or the back-country of a National Park, there are real physical limits to the technology you are able to use; the phone line may literally end at your desk. Pressure filled offices in which people are always fighting fires can also provide an environment not condusive to sustained concentration. None of these environments prevent e-

with the Internet. Moreover, those e-learning courses that use Web browsers usually offer a richer array of material and more interactivity than your average Web site.

Q **Does all e-learning take place in front of a computer? Are there opportunities to get away from the computer screen from time to time?**

A Using e-learning does not have to involve spending all your time at a computer workstation. Many courses allow you to print-out materials and read them away from your computer.

Q **This is the first time I have heard of e-learning. How long has this approach been around?**

A You may be surprised to learn that e-learning has actually been around for quite some time. At first, courses used floppy disks. Later compact discs were the medium of choice. It is only fairly recently that networking technologies have evolved to the point where on-line e-learning has become viable and we are only beginning to explore its full potential.

Q **Is e-learning as effective as more traditional forms of learning?**

A Despite the prevailing wisdom that a classroom is the best place to learn, research has consistently shown that e-learning can be as effective and, in some cases, more effective than classroom-based programs.

Q **Does e-learning require a lot of technical skills?**

A A basic understanding of how to use a computer and surf the Web is usually necessary. If you do not know these basics, taking some time to learn would be a valuable investment of your time. Some organizations provide in-person assistance when starting to use e-learning. However, it should be stressed that most well designed e-learning courses are no more complicated that pointing and clicking.

Q **What is the difference between e-learning and distance learning?**

A e-Learning is a popular method of distance learning. Some distance learning programs, however, make no use of electronic technology, such as written correspondence courses. Conversely, e-learning does not necessarily have to be used by remote learners.

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learning. They do, however, often mean that e-learning can not take place on-site. Section three of this guide catalogues the alternative spaces that can be used.

Becoming A Shrewd Consumer

Getting the most value from your e-learning investment can be a daunting challenge. Most of us have little-to-no first-hand experience with e-learning and would benefit from a bit of homework to become *informed consumers*. The learning curve does not have to be steep because there is a relatively simple "sniff test" that you can apply to a prospective e-learning solution.

- *Watch out for learning material that is merely recycled from traditional methods.* Demand for e-learning has grown rapidly, causing eager learners to cry out for new content. This has led some suppliers to rush learning courses out the door by repackaging existing material without taking advantage of the chosen medium. Material presented in a highly linear way—one that does not allow you to branch-off in new directions to pursue curiosities—is a tell-tale sign of this.

- *Technology that is not "user-friendly" (easy to figure out and use) will go under utilized.* Chances are that user-unfriendly e-learning offerings are poorly designed in other ways, too. E-Learning creators are responsible for conducting user tests to ensure that learners do not get frustrated fiddling with the controls. Make sure that the main lessons to be learned are clearly laid out so that learners get a sense of the path forward and learning objectives to be achieved. Controls should be clearly labeled with terminology that have meanings which are obvious. The learner should not have to struggle to find help. Many of these factors may be clear just by looking at visual previews ("screen shots") of the e-learning application.

- Some e-learning solutions are full of the latest bells and whistles. *Do not be seduced by the special effects and gadgetry unless they provide an underlying functionality.* It is equally important that the technology used can function on your office's technological infrastructure. This is not always easy because e-learning suppliers are often anxious to take advantage of the latest technology, while your information

technology department is more concerned with making sure your mission-critical systems operate reliably. In some workplaces, workers have to make do with older generation computers given the expense of technology. Involve your workplace's technology staff to make sure that the e-learning solution is a good fit, partly because they might have to install additional software on your computer.

- *Try to select e-learning solutions that cater to an array of learning styles* or, at the very least, the learning styles of your principal users. There is some debate about whether offering more than one method of conveying information simultaneously is a good idea (such as spoken and written text offered at the same time). This said, good e-learning products offer a variety of instructional methods, offering users options and creating a richer learning experience.

- *Be suspicious of e-learning suppliers who are more concerned about their "intellectual property" over your learning needs.* Suppliers do have legitimate reasons for making sure that their hard work is not pirated. On the other hand, overly onerous restrictions on information and its usage can impede the learning process. For example, some users have to refer back to material at a later date in order to retain lessons learned. Some solutions do not allow for this. Make sure that there is a way to access, print, or archive noteworthy material for future reference.

- Both learners and their supervisors have a vested interest in tracking progress towards the achievement of learning goals. Since e-learning often takes place away from the office, learners want simple mechanisms to communicate, document, and report progress. Good e-learning courses offer an e-mail confirmation of achievements. For their part, supervisors want to be able to track progress in order to ensure that staff are getting the support that they need.

As with all public investments, taxpayer money must be spent wisely. Fortunately, quality e-learning solutions can be counted among the best values.

"Good e-learning products offer a variety of instructional methods, offering users options and creating a richer learning experience."

TENDING THE E-LEARNING GARDEN

e-Learning Leadership

Building an agile workforce by investing in learning demands leadership skills from the manager. Success does not just happen but must be nurtured through the good times and the bad. There are times when the manager acts as *champion*, raising awareness, making the business case, and making sure that the necessary resources are in place. There are times when a manager acts as *coach*, providing encouragement, offering counsel, and otherwise blazing the trail for others. There are also times when the manager acts as a *teacher*, engaging staff intellectually, bolstering their curiosity, and mentoring them through career transitions. Fulfilling these roles is no small accomplishment.

This section will offer advice to help equip you to face the challenge. This includes advice about how to follow through once you and your staff have committed to an e-learning solution. Not only should you be helping staff members to complete e-learning commitments, but you should give some thought to leveraging the resulting knowledge and skills.

The Sweet Smell of Success

Success in e-learning, as with any complicated endeavour, is never guaranteed. There are things that managers can do which either help or hinder others. Research into the enablers underpinnning e-learning successes is relatively sparse. Nonetheless, there is enough of it to compose a respectable list of good practices.

- SUCCESS FACTOR #1: Support and Promotion. A recent study of more than 700 people found that marketing and

WHY BLENDED WORKS BEST

By blending traditional and electronic learning approaches into one solution, one achieves a number of synergies.

- Many of us learn best in a social environment with some in-person contact and interaction.

- Facilitators and instructors speed knowledge acquisition, providing inspiration and motivation in the process.

- Support and direct feedback is on-hand to cope with unanticipated demands.

- A mixture of different instructional approaches provides stimulating variety.

- Networks and bonds of trust form more readily in face-to-face social situations.

- Some material has greater emotional impact when it is live and in-person instead of being mediated by technology.

promotion are decisive factors that caused learning to give e-learning a try. As one participant in our own research claimed, 'you can never have enough marketing of e-learning'. This is to some extent common sense; the more we know about what is available, the more likely we are to take advantage of the opportunity.

Less obvious, perhaps, is the amount of support received. Willingness to engage in e-learning is integrally tied to the amount of support people feel that they receive. This places an onus on managers to express encouragement and accommodate staffs' wants. It also points to the importance of having assistance when using e-learning, especially as the learner is familiarizing his or her self with how it works. If nothing else, this evidence suggests that learning in isolation is not an ideal arrangement.

- **Success Factor #2: Small Steps.** Taking small steps towards integrating e-learning into your worklife and workplace is ideal. One cannot expect the transition among all staff within a short span of time. There will also be a certain amount of scepticism (some of it healthy) of new technology-based approaches. You will probably find that there is a natural constituency in your workplace that will be drawn to technology and want to try it out. Their positive experiences can become infectious, encouraging others to give it a try. These early adopters also tend to have a higher threshold of tolerance for technical glitches so they will not tend to become discouraged as minor problems arise. The learning experiences from these brave few can be used to help others.

- **Success Factor #3: Seeking Blended Learning Solutions.** Combining the familiar with the unfamiliar is usually a good strategy to break down apprehension and doubt. There are also synergies created by blending e-learning with more traditional forms of learning. Facilitated on-line courses, for example, offer support and instruction that can smooth out the transition to e-learning, as well as clarify and reinforce lessons learned. As an added bonus, blended learning offers more flexibility in how one engages others in the learning process.

- **Success Factor #4: Bring Along A Buddy**. When people engage in e-learning in pairs they have a readily available source of support. The self-directed nature of some e-learning solutions can cause people to drop out if they do not have the discipline or intrinsic motivation required. Buddies can provide a course of extrinsic motivation, such as casual encouragement and reminders. If one person has difficulties, then the other may be able to lend a helping hand, especially if one person has previous experience with e-learning. These people can demonstrate to others how it is done and share tips.

- **Success Factor #5: Provide Access to Technology and Space.** Not everyone has access to suitable technology in the office and at home. This is one of the most common complaints of those who have had bad experiences with e-learning. Sometimes the computers (or software within) are past their prime and network connections are too slow. Many public servants, of course, do not use general purpose computers in their daily work and, thus, need the technology in the first place. Technology should be made available.

  Equally important is the availability of a suitable space in which to engage in e-learning. Suggested solutions to a lack of suitable space can be found on the next page. The larger point is that managers hold significant responsibility in ensuring that staff have the proper tools to get the learning they need.

- **Success Factor #6: Computer Training and Assistance.** For those of us who log into a computer for several hours a day, using a computer is easy to the point of becoming completely subconscious. That is not necessarily the norm, especially among older workers, workers with extensive administrative support, and workers in jobs that are not technologically intensive. Undoubtedly, levels of "technical literacy" will vary considerably within an organization. One solution is to ask for assistance from the office "techie", or a member of administrative staff who uses computers regularly. If basic knowledge is clearly lacking, then formal computer training is in order.

- **Success Factor #7: Involvement**. A manager is not doing him or her self any favours by mandating learning by fiat. The

"You will probably find that there is a natural constituency in your workplace that will be drawn to technology and want to try it out. Their positive experiences can become infectious, encouraging others to give it a try."

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LEARNING
SPACE

We all need a physical space in which to learn. Perhaps solitude and comfort are in order, or stimulation and interaction. At the very least, learning is best served in a place that is away from the distracting hustle and bustle of work ... not to mention the push and tug of home. There are plenty of options that managers and learning specialists can put in place.

FACILITATED GROUP SPACE

People often learn best in a group environment where support is available. It could be a learning facility specially designed for e-learning or an empty conference room booked for learning sessions. All it takes are a few laptops, some network connections, and a knowledgeable person willing to lend a helping hand. Help can come in the form of instructional assistance or technical troubleshooting (or preferably both). This type of space is ideal for encouraging groups of people who are unfamiliar with technology to get started down the path of e-learning.

e-LEARNING HOTEL

Some workplaces do not have computer work-stations with the power to handle multimedia or high bandwidth Internet traffic. Many public servants do not have computer workstations at all or work on computers exclusively devoted to a narrow set of tasks. Even those with suitable equipment may want to get away from the distractions that surround their workstation.

In such cases, managers are responsible for making sure employees have a dedicated e-learning workstation. These spaces are called hotels because they offer employees a temporary space to engage in learning. Each space may be assigned on a casual basis or booked ahead of time.

AD HOC e-LEARNING STATION

Space is tight. It does, after all, cost a great deal of money to set aside a workstation to create an e-learning hotel. If this is so then you may want to have your e-learning hotel cohabit with another organization. If that does not work then make use of spare space. Empty workstations and meeting rooms are ideal. Add a laptop computer and an Internet connection and you are ready to go.

SIGNAL SPACE

A personal workstation can be used to engage in e-learning. It is also a space mired in distraction—phones, e-mail, and colleagues knocking at the door, to name just a few. Something can be put in place to signal to others that you are busy and not available. Wearing headphones may be enough. If not, try stringing police tape across the opening of the cubicle. A note on the door might reinforce the point. Forewarning colleagues could not hurt either.

These measures can be useful only insofar as the cultural expectations of the workplace allow. If you are given a great deal of flexibility and autonomy, then this "signal space" may work. If you work in a pressure cooker, a different type of space is preferred.

HOME AND MOBILE OFFICES

Sometimes the workplace is too full of distractions or maintaining work-life balance prevents people from spending extended hours at work. In either case, working outside the worksite is an alternative. You may borrow a laptop, grab an e-learning CD-ROM, and head to your local café. A large portion of e-learners prefer to learn at home because their personal computers are more advanced than those at work. To make this work, without unduly infringing on leisure time, supervisors need to free-up some work time.

TELECONFERENCE CENTRE

Distance learning that uses advanced technology tends to take place in a centre dedicated to streaming video across large distances. This can be expensive and, in the past, computer glitches were prevalent. Things are changing and teleconferencing may be a better deal than travel. Bouncing interactive video off satellites also offers a potentially rich interactive experience.

CONNECTED CLASSROOM

A number of university programs recommend that their students use laptops within the class-room. The logic is simple: why require students to record notes when they can listen and download notes (and other learning materials) at their convenience. This is a venue specifically set up to accommodate blended solutions.

motivation to learn will be low without staff involvement and buy-in. Supervisors are also unlikely to be able to properly assess organizational learning needs without team involvement. Involving in-house learning and information technology professionals is just as crucial. For example, technology staff help ensure that a particular e-learning solution meets necessary technical specifications, equipment is modified, and realistic expectations are set about the art of the possible. Costly technical problems and learner frustration often result in the absence of this input.

There is one additional factor that can improve likelihood of success and that is patience. Realistic expectations should be placed on staff or the novelty of the technology-enabled learning solution wear off quickly.

Overcoming Pitfalls

Change often unfolds along a predictable path: early intrigue and enthusiasm lead to adoption; success encourages further exploration; then the train comes off the tracks, so to speak, and momentum begins to subside. It could be a difficulty that prevents normal operations or one which simply irritates the user. It could be other demands on time that zap energy and forward movement. It could be barriers that get in the way, preventing completion. In any event, there is not enough fire in the belly to make it through the mid-point doldrums or over a particular hurdle.

E-Learning has its own set of pitfalls and obstacles that undermine follow-through and

completion. Much of the learning that comes under the e-learning banner relies heavily on self-direction and, thus, requires some discipline and coaching. Some e-learning takes place in isolation, off-site or off-campus, and lacks the drivers that result from peer pressure and group support. There are other factors which are highlighted below. Dealing with these factors effectively requires managers to don their coaching uniforms and engage their staff members.
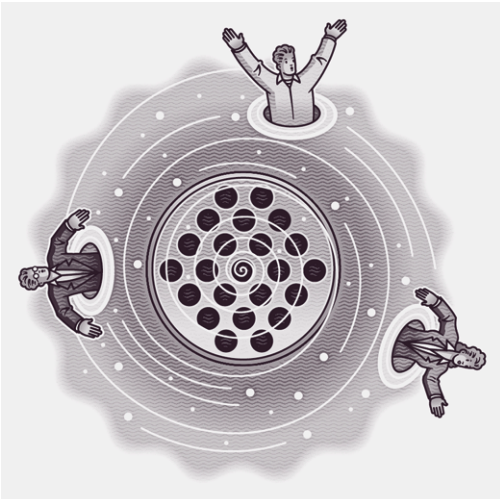
- *e-Learning drop-out can, in some cases, pose a problem.* There are countless distractions that can sideline learning. Addressing this challenge requires that learners time e-learning activities to coincide with the rhythms of the work year. If a course cuts across a busy period, then rescheduling is required. Fortunately, e-learning handles this easily. Managers should also place clear expectations on employees during performance reviews and provide periodic checks to ensure that learning plans are being implemented. Time needs to be blocked off to provide time for learning without it interfering with leisure time and ensuring follow-through.

  There are also situations in which non-completion of an e-learning course is not a problem at all but, in fact, offers a benefit. E-Learning can provide learners with an opportunity to sample content before completely opting in. This experimentation should be accommodated so long as an onerous financial penalty does not result. It may help learners become acquainted with the e-learning approach and discover solutions that are right for them. Thus, a fixation on completion rates is not a useful indicator of success.

- *When learning activities do not seem to be related to a person's job* or organizational need, the learner is left pondering why am I doing this?' This problem can cause the learner to go through the motions and offer a minimal amount of energy; that is, they "satisfice". Investing time early in the process and involving employees will help overcome this problem.

- Participants in a learning program are understandably concerned with how the investment in time and energy translates into a step up the career ladder. Unfortunately, this can sometimes lapse into *sharky careerism and an undue emphasis on credentialism*. Many e-learning courses do not offer credentials, such as those which would result from a

degree or certificate granting program. This causes many to regard e-learning as a lesser form of learning and, thus, invest less of themselves in the process. One gambit that you may apply to ward off this tendency is to seek out certification-based e-learning opportunities, such as those typically offered in computer e-training. Another gambit involves managing expectations upfront and discussing the inherent benefits of learning. One should also let it be known that credentials can offer a false sense of security and that robust employability is more than having a few pieces of paper to hang on the wall. Let it also be said that e-learning, like all learning, contributes to career advancement by developing a person's knowledge and skills, as well as improve performance on the job.

- Some learners are *technophobes*; people who instinctively reject technology-based solutions without giving them a fair chance. Some e-learning champions are *technophiles*; people who habitually converse with jargon that intimidate lay persons. Both can frighten people away from e-learning. The coach's job is to act as translator or, if the technical knowledge is lacking, then an advocate for plain language solutions. This is particularly important in overcoming perception problems among the *merely reluctant*; those who think that e-learning is not for them, even though they do not fully understand what it is and have not yet tried it.

- *Bad experiences can turn people off of e-learning, sometimes for good.* It could be technical glitches, poor design, inflated expectations, or a lack of quality content. This can be avoided by choosing solutions wisely and making sure that support is in place. When it happens, your response may determine someone's future learning options. To put it bluntly, the stakes are high. By acting as a "servant leader"—someone who works to solve employee problems and actively help them achieve their full potential—you help put the technical support in place ... or help find a more suitable e-learning opportunity ... or better prepare learners for their next attempt.

Learning Progress

A common concern about e-learning is the difficulty in gauging progress and results. To be fair, learning benefits in general are a challenge to observe and measure under ideal circumstances. The learning that takes place is not always tangible. Even tangible learning benefits do not always accrue immediately after the learning experience takes place. E-Learning poses a unique challenge insofar as it often takes place in isolation, making it difficult to confirm that the learning has taken place in the first place. This has led to countless efforts to better measure learning and its results. It remains to be seen whether these efforts will pay off. In the meantime, there are a few simple things you can do to make sure employees are following through and drawing the promised benefits.

It is useful to consider tracking learning progress using one or more of the following methods: lessons learned briefings, competency and credential acrual, and measurement.

- **LESSONS LEARNED BRIEFINGS.** In some work units, managers ask their staff members to account for the learning that has taken place. This has taken the form of a brief written report or a presentation of lessons learned to fellow team mates. This approach has the added benefit of sharing lessons with others, spreading the knowledge throughout the team and, in the process, making the most of a learning investment. What should the briefings include? That depends on the goals stipulated ahead of time. If you are looking for a generic list of questions for the briefing to answer, the list of questions in the margin are as good as any.

- **COMPETENCY AND CREDENTIAL ACRUAL.** From a learner's point-of-view there are also measurement needs. How does one demonstrate to employers that you hold particular knowledge and skills? For most, this is done with the credentials one acquires as one completes a learning program (such as a degree granting program). Many e-learning solutions grant credentials, notably those which certify information technology professionals. Yet, e-learning is a more pervasive, and often less formal, mode of learning. If this approach is to become commonplace, an undue fixation on credentials can be an impediment. This requires us to

WHAT WAS LEARNED?

What should you ask after your employees have taken part in an e-learning course? The answer will differ from organization to organization and depends on the learning objectives set down within a learning plan. Nonetheless, there are a few key questions that can be asked.

What were your top three expectations, prior to taking the course, about what you would learn?

List three positive aspects of the course you took.

What do you think was missing from the course?

Would you recommend this course to others? Why or why not?

How are you going to apply the lessons learned?

rethink the way we assess developmental progress.

Good documentation of courses completed and lessons learned can be a first step. This documentation can be folded into a *learning dossier* that tracks progress towards achieving learning plan objectives. Many teachers, for example, maintain a dossier that chronicles the acquisition of teaching skills, including: a statement of learning philosophy, a list of courses taught and taken, awards received, course evaluations, letters of recommendation and endorsement, teaching materials created (e.g. textbooks), and so forth. This dossier provides readers with a reasonably comprehensive picture of previous professional accomplishments. The learning dossier concept can be applied to virtually all professions.

- **Measurement.** As the introduction to this section testifies, measuring e-learning is a complicated affair. The Conference Board of Canada conducted a survey of employers about their use of e-learning. On the issue of measurement: "Of the 38 per cent of employers who measured e-learning outcomes, 96 per cent measure employee satisfaction, 84 per cent measure employee learning retention, and 63 per cent measure employee behaviour change." Yet, about a quarter of employers are not at all confident about the usefulness of these measures and less than half link them to long-term planning. This suggests that managers should not measure simply for the sake of it and measures of actual outcomes are very rare. This is not to suggest that the benefit can not be quantified. However, the lessons learned should be measured in terms of organizational benefits expected (e.g. capacities obtained). The value of e-learning can also be calculated in terms of the costs saved relative to other learning methods, such as the reduced costs of travel.

The ultimate decision about how to track and report progress comes down to common sense: what is enough to satisfy you and your supervisors that you are making wise learning investments?

"Learning dossiers are an ideal companion to a learning plan. They can help document lessons learned, credentials acquired, and learning goals achieved."

E-LEARNING
IN ACTION

Cases in Point

It is one thing to appreciate the complexities of e-learning in conceptual, textbook-like terms. It is quite another thing to understand how e-learning works in practice through specific applications. What types of subject matter are being taught in the real world using e-learning? How are these subjects operationalized in an e-learning format? What specific benefits come from these applications? This section will provide examples of how e-learning can be put to best use and, in so doing, answer some of these important questions.

When organizations within the Canadian economy were polled about the types of things they use e-learning for, the three most popular topics tend to be technologically oriented: learning about new technology, software training, technical skills. There does seem to be a natural fit between technology intensive occupations and technology-based learning approaches. However, the more interesting examples tend to be those with a broader application across an organization. This is the most promising area of growth for e-learning. This section will look at two in some detail: official languages e-training and e-learning-based orientation sessions. These areas apply to virtually every public organization, to some degree, and are priorities for the government in general.

Official Languages e-Training

For the typical adult, acquiring a second language is confounded by a learning paradox: one can not become fluent in a new language unless it is practiced regularly, yet, compared to children, adults tend to have less time to practice routinely. Without
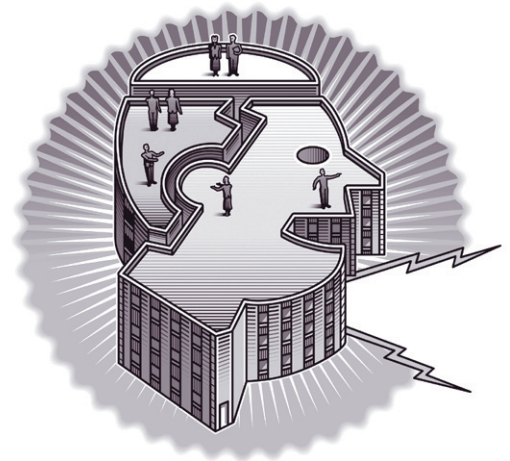
emersion the chances of successfully acquiring the language diminishes considerably. To overcome this paradox, the Public Service has made sizeable investments in language training that involve either a lengthy break from normal work duties or the blocking-off of a large portion of the workweek for classes and tutorials. There is no question about whether these methods get results. They do. These methods are not without their limitations, however. They are expensive, impose heavy scheduling demands, and are not usually accompanied with regular reinforcement within the workplace. These limitations make it difficult to achieve the goal of a broadbased bilingual workforce.

Fortunately, e-learning solutions are usually designed to overcome these particular limitations, as well as add several features that enhance learning of a new language.

- E-Learning can offer instruction to a wider audience at a lower cost than most other forms of language training. It is not always a complete substitute for those cases in which in-person, one-on-one tutorials are necessary. Yet, even in such cases, e-learning adds another set of resources to draw from.

- E-Learning maintains an on-going connection with the learning process. Some language students complain that their skills erode without continual reinforcement and growth. In such cases, e-learning helps protect investments in immersive language courses after those courses are complete.

- Learning a language is a process that engages the senses: one acquires reading skills, the ability to comprehend the spoken word, and a repertoire of verbal skills, such as correct pronunciation. The multimedia capabilities of advanced e-learning solutions are ideally suited to such material. These capabilities are also able to draw linkages between writing, hearing, and speech. Most off-the-shelf language training CD-ROMs, for example, offer choices about the senses a learner wants to engage.

- Second language training may not be offered in a person's locale, nor offered at a convenient time. This poses a barrier to career advancement in certain places. E-Learning's distance learning capabilities help rectify this situation.

The public servants we spoke to also felt that language e-training helped them overcome the bashfulness that often accompanies attempts to

*"The e-learners we spoke to noted that **language e-training** is an ideal way to continually practice new language skills within the workplace, making sure that these skills do not languish from disuse."*

learn a new language. Mistakes in diction and pronunciation can sometimes make the most self-assured person blush. The technology provides a safe space for trial-and-error or, in those e-learning approaches which involve contact with others, the technology can have a mediating effect that minimizes the embarassment.

With these benefits one might expect language e-training to be commonplace. Alas, we are only beginning to scratch the surface of the potential of this approach. Among e-learners within large companies in Canada, less than five percent have used e-learning for language skills development. In the Public Service, language e-training is in its formative stages. This is not to suggest that it is not making significant inroads. In fact, the Public Service's early forays into this area are particularly illustrative. We can all draw lessons from this experience.

CASE #1: Language e-Training Abroad. Public servants working abroad often live in isolated islands with respect to learning opportunities unless they are able to find training locally. Even then, the learning may not be the right fit given the vast differences in culture and priority that exist across the globe. The Public Service Employee Surveys show that, even though learning opportunities have risen markedly for the vast majority of public servants between 1999 and 2002, those working outside of Canada reported a decline in the availability of learning opportunities. Partly for this reason, e-learning is seen as having an important niche. This is not just the case among public servants. Large multinational corporations, such as IBM, are using their extensive e-learning system to keep their globally dispersed workforce abreast of the latest knowledge.

The Department of Foreign Affairs and International Trade (DFAIT) has also risen to this challenge with the aid of e-learning investments made by its Canadian Foreign Service Institute (CFSI). Almost 67 per cent of the organization's employees work in 158 offices located abroad. The number of e-learning courses available to these employees rose (between the 1999-00 and 2001-02 fiscal years) from 17 to 66. Likewise, participation shot up by over six hundred per cent over the same period (ending up at 2,346 participants in the end). A wide array of e-learning techniques are used, as the list in the margin shows.

LEARNING ACROSS THE GLOBE

The Canadian Foreign Service Institute employs a variety of e-learning methods.

COMPUTER SUPPORTED AUDIO CONFERENCING: An instructor trains students in remote locations across the world through teleconferencing aided by Web content.

LEARNING PORTAL: The Institute maintains a Virtual Campus that offers courses, e-tools, and e-handbooks. This includes an application that allows training managers to develop and create courses instantly on the Web.

E-MAIL: Background material, exercises, and corrected assignments are exchanged with instructors using ubiquitous e-mail technology.

VIDEOCONFERENCING: Some subject matter experts conduct lectures and discussions on specific topics with the aid of video conferencing technology.

CD-ROM AND VIDEO TAPE: Information with visual characteristics is often recorded on CD-ROMs and video tapes. These can be copied and sent around the world, if need be. Orientation training, for example, benefits from this by showing people on the outskirts what headquarters looks like.

The CFSI's Centre for Language Training launched its Official Language Online Training program in January of 2000 in response to client requests and past success with other distance language training courses. Over the next two years the program expanded from three to thirteen courses, catering to a total of 1179 participants over the period. All the courses are instructor-led, lasting eight weeks in duration. Much of the learning takes place through assignments, each corrected in short order (within 48 hours) by the instructor. Full completion comes with a certificate of accomplishment. Pre- and post-course tests are implemented to measure learning gains, satisfaction with the learning experience, and assess participants' risk of non-completion.

The courses are developed through questionnaire-based needs assessments. This user-centred process prompted the creation of courses that develop listening skills using both audio and video (including listening skills specifically for receptionists), reading skills, and writing skills. As one participant noted: "It was with scepticism and reluctance, in addition to desperation to improve my French, that I signed up for this course. What a surprise! Each lesson was very beneficial. If I am offered such an opportunity again I will not let it go to waste." Having a point of human content, in this case a flesh-and-blood instructor, played a key role in achieving such a high level of satisfaction and practicality.

Case #2: e-Learning Language Resources. DFAIT's courses are just one example of how official language training has been operationalized within an e-learning environment. The Canada Customs and Revenue Agency offers another in the form of the Second Language Evaluation (SLE) Practice Tests. The series includes 20 on-line practice exercises (half in English, half in French) to help public servants prepare for the reading and writing portions of the Public Service Commission's SLE tests. The Web-server based software used to administer and grade the tests is made available through The Knowledge Exchange, a service for Public Service organizations from Public Works & Government Services Canada.

Statistics Canada is one organization that took advantage of this resource to augment its on-line French and English grammar courses (part of Statistics Canada's KLICK e-learning program). Within about six months, 2285 visits for testing took place. There are many other examples like this one. In fact, the software has been downloaded

from The Knowledge Exchange over 300 times and installed in many e-learning programs throughout the federal government.

Employee Orientation Training

When new employees arrive on the job they usually know little-to-nothing about the organization that surrounds them. What, for example, is the organization's mission and key business lines? Who are the people working on similar or interconnected tasks? These questions, and countless others, need to be answered if recruits are to work to their full potential. Increasingly, work takes place across organizational boundaries, thus workers work best when they know the landscape.

This is where employee orientation training comes to the rescue. Departments and agencies are making substantial investments to ensure that their new talent hits the ground running. Yet, many orientation programs fail to live up to their promise due to a number of challenges. New recruits may arrive many months before an orientation course is offered, forcing many to tread water in the meantime. Recruits may also arrive in large waves, such as when major organizational expansions occur. There may not be enough seats available in a course to accommodate them all.

This is where e-learning comes to the rescue. E-Learning offers a set of unique characteristics that make it ideally suited to employee orientation training.

- Orientation training is ideal for just-in-time e-learning. Courses start when the learner needs them, not during pre-scheduled time periods. This offers organizations greater freedom when timing their recruitment. Employees are not orphaned simply because they were hired at a time that is inconvenient for trainers. E-Learning also scales to meet an organization's recruitment drives.

- Much of the material taught in orientation training is fairly standardized and full of factual information. Instead of dumping large quantities of this information on learners, this factual information can be provided on-demand and in convenient formats so that it is more likely to "stick" in the learner's head.

- Orientation training can be just as valuable to old hands as it is for new recruits because people may need a refresher course from time to time. Yet, experienced employees may not want to sit through an entire course. E-Learning can be done *à la carte*. By providing learners with the opportunity to skip lessons that they have already mastered, this reduces the amount of time necessary to refresh and update vital information. The non-linear features of e-learning come in handy here.

- Many organizations publish manuals to help new recruits. This information is subject to two key limitations: it tends to be rather dry in nature and it becomes stale very quickly. E-Learning offers organizations an opportunity to add some instructional design to the information in order to make it easier to comprehend and retain. Furthermore, this information can be updated regularly with less cost than would otherwise be the case.

"Orientation training material that leverages e-learning methods can liven up dry, factual material and can be readily updated to remain up to date."

Because of these benefits, 17.6 per cent of Canadian private sector workers who have taken e-learning have taken it for orientation training. When done well, an e-learning version of orientation training goes beyond being a simple course and becomes a library of vital organizational information that employees will revisit many times.

CCMD's internal orientation program is a particularly interesting example because of its emphasis on blending e-learning with face-to-face approaches. The program involves four modules.

- The first takes place almost entirely on-line in order to teach new employees the basics right away. This includes information about: the facilities and resources available within the Centre; who does what and where they do it; and the general work environment.

- The second module situates the individual within the larger organization. It spells out the mission, mandate, priorities, clientele, and policies. It helps build common purpose. The e-learning component involves distributing materials that are used in the various live and interactive presentations which take place.

- The third module helps employees learn more about themselves, including their own learning style, strengths, and

contributions. E-Learning adds value by providing students with a self-guided survey to test their learning style. The results are presented and discussed during a live session with an instructor.

- The final module situates employees and the Centre within the larger Public Service. This includes showing people the Public Service-wide resources and opportunities available to them. E-Learning plays a role here by electronically linking learners to the wealth of Public Service resources and policies.

This example vividly illustrates that e-learning is not simply about using technology for the sake of doing so. Instead, e-learning operates best when it is used appropriately, building on the strengths that the electronic medium makes available and complementing these strengths with the best of other forms of learning.

Now, Over To You …

This management guide has provided a primer—an *apéritif* —about how managers and their staff can leverage the power of e-learning to help build a Public Service Learning Organization. As a primer, it is hoped that these lessons offer a springboard to further exploration of e-learning. What is the next step? Two key messages about this came through loud and clear during our discussions with public servants who have used e-learning. The first is that there is no better way to learn about e-learning and its potential than by trying it out. This breaks down preconceptions and provides insights about how it works which are easy to relate to. The second message is that managers should set an example for their staff. By modeling the behaviour they wish to promote, managers can speak more knowledgeably and persuasively about the path forward.

In a sense, these are the most important pieces of advice this guide has to offer. Not only will this help you move beyond an introductory knowledge of e-learning, but it will help you gain an up-to-date knowledge, too. E-Learning is a rapidly expanding field that, through many interesting experiments, has only begun to achieve its full potential. By acting now, you are getting a head start in preparing your workforce for the brave new world of work lying just around the corner.

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ACTION-RESEARCH

What Is Action-Research?

CCMD's action-research process brings together practitioners and experts from both inside and outside of government. The group develops practical advice for dealing with pressing management challenges. The research process revolves around the deliberations of a diverse roundtable—a forum ideally suited for rapidly pooling and scrutinizing knowledge, insights and experiences. The research takes place over a year.

The management challenges are selected by managers and senior executives according to their urgency and importance to the Public Service as a whole. The end product contains leading-edge, focused, practical advice that public managers genuinely value and actively use within their work.

The roundtable is supported by a secretariat composed of scholars and public service researchers.

THE "ACTION" IN ACTION-RESEARCH

CCMD's model of action-research revolves around three cutting-edge learning principles.

Dialogue-based

Dialogue sessions are an ideal forum for pooling knowledge, expertise and insights over a brief span of time. Dialogue probes assumptions and preconceptions, scrutinizes evidence and argument, and formulates fresh solutions to difficult problems.

User-driven

Users of the research are involved at every stage to ensure relevance, quality and real-world situational awareness. A diverse array of users are involved; users who bring very different experiences and perspectives to the table.

Actionable Advice

There is a difference between advice that is merely persuasive and advice you can actually do something with. Actionable advice is timely, clear, widely applicable, and practical. It describes concrete behaviours that can help achieve real-world objectives.

Products

Crisis Management   new

e-Learning   new

Horizontal Management

Horizontal Tools

Innovation

Internal Services

The Learning Organization

Official Languages in the Workplace   new

The Social Union Framework Agreement

Risk Management

Science and Public Policy

Workplace Well-being