getting online
THE GO PROJECT

A Research Report on Online Learning for Canadian Literacy Practitioners

Acknowledgments

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Introduction

Getting Online: Distance Education Promising Practices for Canadian Literacy Practitioners (or for short, the GO Project) is a two-year (2007–2009) national project designed to research trends, technologies, and promising practices in online and distance learning in the field of literacy in Canada.

In the spring of 2005, Deborah Morgan and Diana Twiss approached what was then the National Literacy Secretariat (NLS) about this project idea because they were having great success with teaching the "Writing Out Loud Instructor Training" (http://www.writingoutloud.ca) online and were curious to know how or if others were using distance learning. Yvette Souque, now-retired NLS project manager, suggested that they get in touch with Joanne Kaattari and Vicki Trottier from Community Literacy of Ontario (http://www.nald.ca/clo/), as they had a strong history of online training development and delivery.

> *Diana and I started emailing Joanne and Vicki over the summer, sharing ideas and insights about the literacy communities in our regions—Diana in British Columbia, me in Alberta, Vicki in Northern Ontario and Joanne in Central Ontario. When the opportunity presented itself to meet face to face at the Provincial Literacy Conference in Alberta in November 2005, we were excited about furthering our discussions about a research project that would explore the use and value of distance learning in the literacy field.—(Deborah Morgan)*

They spent the first part of the meeting getting to know each other. The four had extensive experience in literacy and in working/learning online, but wondered if they actually could do this project together. Did they share the same values about and interest in literacy and adult education? What roles would each play? Did they really have the time to commit to such an undertaking? These were difficult questions, but after a day of talking, sharing meals, and visioning about the future, they decided that, yes, they could (and very much wanted) to take on this project together, as a team.

> *I love the cross-Canada team of literacy-based researchers/writers/ facilitators we have put together for the GO Project. Our different backgrounds and experience give the project a richness and validity that I find quite irresistible. Collaborating with this dynamic team is really productive, stimulating—and fun!—(Deborah Morgan)*

Following the face-to-face meeting, Deborah, Diana, Vicki, and Joanne continued to work from a distance, relying on *FirstClass* conferencing software and the occasional teleconference to design and write the Getting Online Project proposal. One of the biggest obstacles was to find an organization that would host the project grant money. The team was very grateful when Athabasca University (**http://www.athabascau.ca/**) agreed to handle the finances, and especially pleased when Dr. Pat Fahy, a professor with the university's Centre for Distance Education (**http://cde.athabascau.ca/**), expressed an interest in playing the role of university liaison and advisor for the GO Project. During that time, the group asked Lynn Best from Newfoundland to join the team. Having just completed her Master of Adult Education degree through a distance program at St. Francis Xavier University, Lynn added an Eastern Canadian perspective, making the project a truly national one.

In May 2006, after 5 months of consultations with Yvette at the NLS, discussions with local literacy practitioners, and writing and rewriting their project ideas, the proposal for the Getting Online Project was submitted to the National Literacy Secretariat in Ottawa.

The next 12 months were a roller coaster ride for the entire literacy community in Canada. It seemed that everything was put on hold awaiting federal election results. Following the resultant change from a Liberal to Conservative government, the Ministry of Human Resources and Social Development restructured departments (e.g., the National Literacy Secretariat became the Office of Literacy and Essential Skills), reappointed staff, and then made the unexpected announcement of budget cuts to literacy.

During that year, the group did not give up or dissolve the team assembled for the GO Project. With the commitment and tenacity typical of literacy workers, they continued to talk online about the project and the need to find ways for those in the field to access training and support, especially given the reality of decreased funding for literacy initiatives such as conferences and regional meetings. The team supported each other through the frustrating months of change and uncertainty, so when the GO Project was finally approved in May 2007, they were an even stronger team that was even more convinced the goals of the GO Project were important and timely.

The details of the project were planned well. With valuable prior experience working on collaborative research projects, they recognized they would need face-to-face team meetings, as well as

computer-mediated communication, so they budgeted for three meetings over the 2 years of the project. These meetings are essential to the continuity and consistency of the work that is being done, individually and collectively, especially given the vast geographic distances over which the GO team works. The team has used this valuable time together to carve out timelines, assign responsibilities, develop protocols (such as an online survey), and strategize how best to gather and analyze data.

In the first year, the project members were divided into two smaller teams: an external team to research the use of online learning in related fields, and an internal team to research what is happening in relation to online learning in the Canadian literacy field.

Even though they worked as two distinct teams, there was considerable crossover activity between the two. For example, when members from one team wrote a piece on methodology for the research report, they relied on each others' ideas and feedback during the process. Similarly, one member from each team has been analyzing the data collected using *ATLAS.ti* software. These team members have worked closely to learn how to use the software while sharing newly discovered tricks and shortcuts with each other.

What follows are the findings of the two research teams. The goals, research questions, and approaches are clearly presented in the methods sections of the external and the internal reports.

Executive Summary

The *Getting Online: Distance Education Promising Practices for Canadian Literacy Practitioners* (the GO Project) is a two-year (2007–2009) national project designed to research trends, technologies, and promising practices in online and distance learning in the field of literacy in Canada. This project includes *A Research Report on Online Learning for Canadian Literacy Practitioners, a Promising Practices* manual, an online course, and self-directed training modules on the GO website. The following is an executive summary of the research report.

With funding from the National Office of Literacy and Learning (Adult Learning, Literacy and Essential Skills Program of the Government of Canada—now known as Office of Literacy and Essential Skills—OLES), the GO Project team of Lynn Best, Joanne Kaattari, Deborah Morgan, Vicki Trottier, Diana Twiss and Pat Fahy set out to identify ways in which organizations outside of the literacy field and literacy practitioners themselves accessed training and support in a national and provincial landscape marked by reduced budgets and restructured funding streams. In the spring of 2007, the team strategically divided into two teams: the external team and the internal team. The two teams did not work in isolation; instead, they shared ideas, information, and feedback. This report is the culmination of their research and analysis of findings.

Literature Review

The research team conducted an extensive review of the literature related to online learning and literacy in North America. Their search included, but was not limited to, literacy publications, print-based and electronic materials, and academic journals. One team member wrote the literature review with input and feedback from the other team members. Dr. Pat Fahy, Athabasca University, reviewed and validated the content.

The Need for Literacy Training and Learning

In such a geographically vast country with a diverse population with varied life and work needs, literacy and learning is a significant national issue. According to the Canadian Council on Learning (CCL, 2007), over 40% of the Canadian adult population have low literacy levels. Furthermore, specific segments of the population, including Aboriginals, Inuit, and immigrants represent an even higher percentage of adults with low literacy skills in English and French (ABC CANADA, 2005).

Despite these statistics, the CCL and other organizations note that federal and provincial governments do not invest sufficient resources to enable individuals and organizations to work effectively towards improving literacy rates.

History of Distance and Online Education

Distance and online education have a much longer history in Europe and the United States than they do in Canada. Evolving from correspondence courses in the 1800s, as technology advanced, so too did the range of course offerings and modes of delivery. Most programs were offered by post secondary institutions, although a number of private organizations, including the International Correspondence School (ISC) also offered certificate courses.

After World War II, more and more individuals needed and sought post-secondary learning opportunities. Institutions adjusted their delivery methods to accommodate working students. By the 1970s, three Canadian institutions—Athabasca University, Tele-Université de Quebec, and the Open Learning Institution of British Columbia—offered credit and non-credit courses by distance education. Currently, more and more organizations, institutions, and workplaces across Canada offer or support some type of distance or online learning opportunity for their clients. Although many of these programs target post-secondary learners, others, for example, the AlphaPlus Centre in Toronto, Ontario, offer learning opportunities for adults with low literacy skills. The *Writing Out Loud* program is an online opportunity for practitioners to learn more about the teaching of writing in adult literacy classrooms and in tutoring sessions. Literacy Basics offers 12 training modules, including assessment, instructional strategies, evaluation, and program marketing and strategic planning. In addition, the National Adult Literacy Database (NALD.ca) is an Internet-based repository for research and resources in adult learning.

Opportunities

Distance and online education programs present many benefits for providers and for learners. With flexible delivery methods, accessibility is improved, life style needs of learners and indeed, practitioners are addressed, new collaborative learning opportunities emerge, and reflective discussion between Canadians across the country occurs. Specifically, organizations and practitioners can share resources, exchange ideas, network, deliver courses, and research practices. As a result of online options for professional development, practitioners are able to access training not bounded by time and geography, often at a lower cost.

Challenges

Along with benefits, the literature also contains references to challenges and conflicts that arise for learners and organizations in the delivery, acquisition, and evaluation of distance learning. It is often more time consuming — two to three times more (Wiesenberg & Hutton, 1996) — to develop a course for distance education than for face-to-face delivery, especially in the early stages of course design (Matthews, 2004). Some learners also lack geographic and financial access to the technology itself, an issue further compounded by the fact that many adults with low literacy skills also have low income levels. Because of the technology itself, facilitators and learners each need a level of expertise, comfort, and confidence with and of the medium. As well, practitioners and learners are challenged to create a difference concept of "connection" and to communicate with each other that ways that are constructed within the parameters of the technology used. Distance and online education requires different facilitator skills (Bower & Hardy, 2004) and innovative ways to support learners (Chang Barker, 2006).

Addressing Practitioner Learning Needs through Distance and Online Opportunities

The literature reviewed for this project includes reference to the needs and demands of literacy practitioners for additional, effective, and inexpensive ways to learn how to teach at a distance. Authors discuss the importance of practitioners having their own online learning experience before teaching online (See Fahy, 2002; Illinois Literacy, 2006; Rowntree, 1995). Other authors explain the importance of practitioners understanding the available technology and maximizing its features to create positive teaching and learning experiences (See Middletown, as cited in Chang Barker, 2007; Milhauser, 2006; Rowntree). Wheeler (2007) recommends that practitioners be mindful of content requirements and technical limitations when developing resources and activities for online learners. Key supports are course developers who can advise practitioners in proven and effective methods of online curriculum design (Schum & Benson, 2003). Practitioners may also require time to develop and practice new facilitation skills that are effective in online environments. A number of authors acknowledge the steep learning curve practitioners experience as they navigate through unfamiliar territory, redefining their teaching style and methods to develop a sense of community and provide learner support online (See Green, 1998; Mills, 2003; Rowntree; Wheeler).

Conclusion

Based on the literature reviewed by team members, it is evident that Canadian literacy practitioners and organizations continue to work diligently to strengthen their support of the literacy needs of learners. As a result, the use and evaluation of online learning technologies is evolving and increasing in Canada. However, the GO Project team identified a gap in the research literature pertaining to the assessment of how the professional development needs of literacy practitioners are being met in a distance or online environment. Addressing this gap is especially important when considering the increased likelihood of practitioners offering online literacy programs if they themselves have had a positive and rewarding experience learning online.

External Research Results

The external team, comprised of Joanne Kaattari and Vicki Trottier, was responsible for conducting research into the online learning practices of external (non-literacy) organizations. The external research team had two goals: (a) to research how other similar, external fields of practice were using online learning technologies, and (b) to research what forms of online learning technology were being used. This was accomplished by searches through electronic and print resources, surveys, and key informant interviews.

The external team conducted extensive Internet and print-based research into the online training offered by external organizations. In the process, they identified 106 Canadian organizations from similar and related fields of practice, including not-for-profit organizations and educational institutions that met all or some of their demographic criteria: delivered online training; represented diverse regions of Canada; represented different sizes of organizations; and offered different types of online learning, including blended, asynchronous, synchronous, accredited, informal, and self-directed.

Determining How External Organizations Used Online Learning Technologies

In July 2007, after receiving Athabasca University's Research Ethics Board approval that the Getting Online research with external organizations adhered to standard ethical practices, the external team invited the 106 targeted organizations to participate via email in the GO external survey. Forty-three universities, colleges, government, and

not-for-profit organizations that offered different types of online learning (academic, professional development opportunities, informal learning, emerging technologies, etc.) responded with completed surveys. These organizations were located in the diverse regions of Canada.

The external team also conducted 19 key informant interviews with external organizations, using a structured interview process approved by the Research Ethics Board of Athabasca University. Seven of the 19 interview participants had also completed a survey. Interviewers asked respondents to more fully describe the successes, challenges, and future of online learning from their perspective.

The external survey questions were designed to collect respondents' feedback on the current tools and methods used by the organization for online training; the objectives of their online training; the results obtained; the different results produced by face-to-face and online training; how online training was introduced and supported; and their perceptions of the future of online learning. Specifically, participants responded to the following six questions:

1 What online or distance tools or methods do you presently use for your own or for staff training, professional development, or support?

2 What are the objectives or purposes of the online or distance practices you presently use?

3 What results, good or bad, have you obtained with your online or distance learning or support practices, and how did you determine this?

4 Do you find online or distance training or support methods produce different results from face-to-face methods or strategies? If so, what are the differences?

5 How were online or distance training or support methods or tools introduced? Did the introduction go smoothly?

6 What future do you see for the use of online or distance training or instruction, support or professional development methods in your organization?

Survey and Key Informant Interview Results

Based on an analysis of the survey and interview responses, it is evident that respondents used a wide variety of tools and methods to deliver staff training, professional development, and support, as well as to deliver online training in general. It also appears that larger institutions are, due

to larger budgets and capacity, more likely than smaller organizations to deliver structured, facilitated courses. Respondents described a wide variety of content and topics that are available online and noted that such online offerings can reduce participation barriers and increase collaboration with colleagues and other learners.

It is clear that institutions, organizations, and practitioners are committed to evaluating these programs in order to improve deliver and outcomes. For the most part, evaluations are positive and indicate online learning has a positive impact on literacy practitioners and on the Canadian distance education landscape. In fact, external organizations identified primarily positive results from online learning compared to face-to-face learning, especially with reduced geographical and financial barriers and increased ability to address individual learning needs and learning preferences. The negative responses to online learning mainly centred on a lack of connection with participants and a failure to address learning preferences. These negative aspects speak to the need for more research and application of knowledge about online community-building and increased flexibility in delivery modes.

The external organizations surveyed used a variety of creative and practical strategies to introduce online learning to participants. Although organizations varied with their approach to implementing online learning opportunities, they agreed a key component of their successful creation of an online learning environment was effective and targeted marketing, facilitator training, and initial and ongoing participant support. Ultimately, respondents predicted a strong and positive future for online learning and identified potential future trends, including expanding current opportunities and exploring new technologies, and increasing the quality of online learning and increasing access to training opportunities.

Forms of Online Learning Technology Used by External Organizations

The external team further analyzed the 106 websites, 43 survey responses, and 19 key informant interviews to identify what forms of online learning technologies external organizations were using at the time of the research. The external organizations identified worked at the national, provincial, regional, and local levels, and included government departments, private companies, academic institutions, charities, and not-for-profit organizations. The research incorporated organizations that provided school-based education as well as those that offered content-specific training to their members, their volunteers, or their employees.

It is clear that the organizations identified are making innovative and creative use of technology in online learning. They used many forms of technology and varied their approaches to training and learning. For example, 44 (42%) organizations used learning or training modules, others relied on asynchronous and/or synchronous learning management system software such as *Blackboard/WebCT* and *Moodle,* and some used communications software (e.g., *FirstClass*). *Web 2.0* approaches were also popular, and represent a promising future trend. Notably, 43 (41%) of external organizations incorporated some form of blended learning.

The number of approaches external organizations used to deliver distance and online learning programs is an indication of the presence and popularity of learning at a distance in Canada. Practitioners can select the delivery option that best suits their learning needs and learning preferences.

Technology Used by Select Literacy Organizations

Adding to the depth of knowledge uncovered by the internal team researching literacy organizations, the external team probed more deeply into the technology being used in the literacy community and its related benefits and drawbacks. The external team designed and launched a literacy technology survey and contacted eight Canadian literacy organizations that were delivering or had delivered online training successfully. Respondents were asked to answer six questions:

1 What platform (or platforms) are you using (or have you used) to deliver online training?

2 Why did you pick the particular platform (or platforms) you used for online learning?

3 What are the strengths of the online learning platform you used?

4 What are the weaknesses of this online learning platform?

5 Would you use this platform (or platforms) again and why or why not?

6 What type of online learning platform or features would you like to use in the future? Why?

Four organizations submitted written surveys and the external research team held key informant interviews with the remaining four organizations.

Respondents reported using a variety of platforms to deliver on-line training, including *Moodle, FirstClass, Elluminate, Skype,* listservs, and website access. For the most part, the literacy organizations surveyed selected a particular platform based on its options and flexibility. Factors also included ease of use, cost, and the ability of the platform to function with a dial-up connection. Respondents gave similar responses when asked about the weaknesses of particular platforms. They also cited a lack of interaction and the challenge of modifying the platform for learners with low literacy as possible drawbacks to some platforms.

Because the sample size is small, it is difficult to draw conclusions and identify trends. However, based on respondents' responses, it appears literacy organizations are content with their choices of technology, but they are also interested in exploring the possibilities that other, newer technology can have to enhance and extend their work.

Internal Team Research Results

The internal team, comprised of Lynn Best, Deborah Morgan and Diana Twiss, was responsible for researching the online learning practices of internal (literacy) organizations. The internal team had one research goal within the overall GO Project goal of researching and identifying best practices for online learning and distance education: to research how practitioners in the Canadian literacy field were using online learning technologies in their practice.

Determining How Internal Organizations Used Online Learning Technologies

Similar to the process the external team followed, the internal team developed questionnaires, conducted interviews, and held focus groups with stakeholders regarding the current state of online training in the literacy field. To meet the overall GO Project objectives, the internal team sought the following data:

► The types of online or distance education tools or methods that the literacy practitioner had experienced

► The objectives or purposes of any online training

► The results of the training and how it was evaluated

► The advantages and disadvantages of online learning compared to face-to-face learning

▶ How the online program was introduced to participants

▶ The future use of online learning for literacy practitioners

In addition to probing respondents for this data, the internal team also asked interview respondents:

1 What makes a good online facilitator?

2 What technology is out there and what are the best ways to use it?

3 What are the factors that led to a person having a negative online experience?

4 What are the factors that contribute to a positive online experience?

5 What is considered to be a "good facilitation" skill?

6 What are the common aspects of "barriers" to participation?

To gather this data and to ensure a nationally representative sample, the internal team posted their survey on the NALD website, contacted national and provincial literacy organizations to encourage practitioners to participant, conducted follow-up telephone interviews with selected respondents to the survey and key informants in the literacy community, and held focus group sessions with literacy practitioners.

Between July and November, 2007, 93 respondents from all regions of Canada submitted surveys via the NALD website. Of these, 84 were used and 9 were discarded because those respondents were not from the literacy field. The internal research team also conducted 23 telephone-based and three face-to-face interviews with key informants across Canada. As well, the team conducted one focus group session with 8 participants from Ontario, using the *Saba Centra Suite* computer conferencing software and one face-to-face focus group session with 7 participants in Newfoundland.

Survey, Key Informant Interview and Focus Group Results

Respondents from regions across Canada except Quebec, Prince Edward Island, and the three territories provided information to open-ended questions that the internal team then analyzed. Respondents were affiliated with all types of learning organizations from not-for-profit to university and averaged slightly more than 15 years experience in the field.

Respondents reported they used a variety of tools and methods to support their own staff training, professional development, and support, including

asynchronous and synchronous conferences, meetings, and courses; Internet-based searches; and listserv and email communication. To do this, respondents employed a wide range of technological tools, including *BlackBoard, Saba Centra Suite,* instant messaging, email, *FirstClass,* and web classroom technology. Respondents had participated in various general online training programs and programs specific to the field of literacy, either as learners or facilitators. Respondents also represented a continuum of skill and comfort with online learning technology.

For respondents, the Internet and computer technology provides Canadian literacy practitioners an effective way to stay connected with each other and to reduce geographic and financial barriers. Their feelings of isolation are mitigated by their ability to share information and resources with colleagues from all over the country. Practitioners are also able to address their own learning and professional development needs through online learning opportunities.

As did external respondents, respondents from internal organizations cited both positive and negative aspects of online learning methods. Internal respondents cited among others, the positive aspects of increased access to professional development opportunities, people, and resources; they also discussed the benefits of being able to work at their own place in a location of their choice. Negative aspects were related to glitches with the technology itself, learning a new skill-set required for online participation, and adjusting to a different mode of social connection with an online community.

Although for many respondents their program of online learning was too new for comprehensive evaluation results, they were able to identify and describe positive and negative differences between online and face-to-face learning outcomes. These differences were impacted significantly by the respondents' own motivations for participation and learning preferences.

Based on respondents' comments, it is evident that online training methods are introduced and supported in a variety of ways by providers and literacy organizations. For the most part, new participants are eased into the online environment and are given information and training on the required technology and modes of communication beforehand. Initial hesitation and participation was often related to unfamiliarity to and glitches with the technological environment.

While respondents noted negative aspects and drawbacks to distance learning opportunities, they also acknowledged the place of online

technologies in the future landscape of literacy work. Respondents were firm in their opinion that face-to-face meetings were valuable and sometimes preferred methods of communication, but they also appeared willing to continue to explore and test possible learning applications in the online environment and overcome its negative aspects. They acknowledged that in order for online learning methods to be more effective, users need to understand and embrace its potential to address the needs of the Canadian literacy community.

Project Outcomes

Over the year, the Getting Online project team members conducted groundbreaking research into online learning practices in Canada. Their work will form the foundation for all future GO Project deliverables including this research report, the *Promising Practices* manual, an online course (Introduction to Online Learning), and self-directed training modules on the GO website.

Through surveys, interviews, and focus group sessions, respondents provided information to open-ended questions that the research team carefully analyzed. Although a considerable amount of information was obtained, some respondents chose to opt out of providing responses or did not fill out these fields consistently. Therefore, it was difficult to infer comparisons. Despite this limitation, the GO Project team are confident that the overall results provide an adequate reflection of the state of online learning in Canada.

A wide variety of platforms and software are being used in a multiplicity of ways to inform, engage, train, and inspire Canadian literacy practitioners. While respondents noted negative aspects and drawbacks to online learning opportunities, they also recognized its great potential to support and advance the work of the Canadian literacy community.

For this to happen, additional training and capacity building is required to support the learning needs of literacy practitioners, organizations, and institutions across Canada. Practitioners themselves will need to be comfortable and confident with online learning techniques in order to realize the full potential of the technology for themselves and their literacy learners.

Literature Review

Introduction

There have been many recent exciting developments in the use of learning technologies in Canada and throughout the world. Technology provides connectivity that can negate time and distance. For the literacy community, the use of technology as a professional development tool holds many possibilities. Like all learning media, the use of technology must be considered within its context to attain maximum benefit for participants' learning. In this literature review, a summation of current research on distance education and e-learning within the context of the Canadian literacy community, including a review of the current state of literacy in Canada; a historical overview of distance education; the benefits and challenges of distance education, literacy, and online learning; and the distance and e-learning professional development needs of literacy practitioners is provided.

Literacy in Canada

The field of literacy in Canada continues to be dynamic and evolving, with many challenges to confront. The Canadian Council on Learning's (CCL, http://www.ccl-cca.ca/ccl) annual report for 2007, *State of Learning in Canada: No Time for Complacency,* provides a snapshot of the current state of literacy. In 2003, 42% of adult Canadians were judged to have low literacy skill levels. In recent years, Canada's population has increased and, compared to 1994, the 2003 literacy rate represents an increase of 1.2 million more adults with low literacy skills. Furthermore, research has shown that there is an erosion of literacy skills in people over the age of 25, concentrated in adults from lower socio-economic backgrounds (CCL, 2007). Documents used by the CCL also reveal that "a proportion of Canadian adults with low literacy skills remains relatively high compared to adults in other countries" (CCL, 2007, p. 85).

The statistics on literacy rates in Canada can be further broken down by population sector for youth, Aboriginals, and immigrants. For example, 20–40% of Canadian youth under 18 years of age have not acquired skill levels believed to be necessary for future social and economic success. Results from the International Adult Literacy and Skills Survey indicate that there was a decline in the literacy skills of youth with lower-educated parents, thus suggesting an inequitable distribution of literacy skills (ABC CANADA, 2005).

Aboriginal people have particular difficulty with literacy. "Over half (54.8%) of the Aboriginal people in the Yukon, 69% in NWT, and 88% of the Inuit in Nunavut, have low literacy, scoring below Level 3" (ABC CANADA, 2005, p. 4), which is the minimum skill level suitable for coping with the demands of everyday life and work in a complex, advanced society. Aboriginal people in Canada have 52 nations with 11 distinct language families, speaking between 53 and 70 languages in each family. Demographically, the Aboriginal population is growing rapidly. Aboriginal communities and literacy promoters struggle with how to provide access to Aboriginal literacy that preserves these diverse languages and culture, while affording Aboriginals equal opportunity to participate in English and French literacy that will facilitate their access to social and economic opportunities in Canada.

In the face of a declining population, the immigrant population is often cited as being a key to economic success in Canada. A significant percentage of the immigrant population, however, do not have sufficient literacy skills in French and/or English, which limits their access to employment and social participation in Canada (CCL, 2007). Despite the fact many immigrants have, on average, a much higher level of education than native-born Canadians; they still have lower literacy levels in both of Canada's official languages (ABC CANADA, 2005).

Globally, many countries, including England, Ireland, and Australia, have identified the importance of literacy and are proactively developing and promoting national literacy programs, many with significant success. Canada, however, "does not invest sufficiently in the development of literacy skills in the general population" (CCL, 2007, p. 98). The Canadian Council on Learning provides many suggestions for improving literacy in Canada, including developing a better understanding of the efficiency and effectiveness of literacy programs. The CCL states:

> Canada's literacy stakes are high. Literacy is an essential part of the fabric of modern society, a thread that links all aspects of life and living in our contemporary world. Its reach is extensive and complex, influencing how fully and effectively a person is able to engage in the social and economic life of his or her community. (CCL, 2007, p. 83)

Undoubtedly, the Canadian literacy community needs to be strengthened. To assist in achieving this goal, one approach is to provide professional development opportunities for literacy practitioners through

the use of technology. In this literature review, an overview of the current research on using technologies for learning with specific reference to the literacy community is provided.

Defining Distance and Online Learning

There are a variety of definitions of distance education. As technology has evolved, the definitions have developed to reflect the change in the media and circumstances used to facilitate the delivery of programs and courses.

The term most frequently used to describe the earliest occurrences of distance education is "correspondence courses" or "correspondence schools." This term describes learning activities in which learners and teachers are physically separated from each other and rely on printed materials that were sent between learner and teacher through the postal service. Learners and teachers communicated by corresponding with each other in writing and print.

As technologies advanced, other types of technology in addition to print were used to deliver learning. In 1972, Moore, an educational theorist, defined distance education as "the family of instructional methods in which the teaching behaviours are executed apart from the learning behaviours … so that the communication between the learner and the teacher must be facilitated by print, electronic, mechanical, or other devices" (p. 76). This definition reflects the diversity of methods and mediums that were becoming available during the 1970s.

More recent definitions reflect how distance learning has evolved to address the holistic needs of learners. Referencing the 1996 work of Sherry, the PHI Wiki (2006) project notes that:

> Distance education applied in a broad sense includes all factors of learning, but is characterized by the separation of the teacher and the learner in space and/or time of teacher and learner with non-contiguous communication that can be mediated by print or some form of technology.

The life style needs of learners are reflected in Wheeler's (2007) definition of distance learning:

> Thus, the term "flexible and open distance learning" or FODL has been coined to describe the means by which learners can access education and learning opportunities at a time, place

and pace to suit their individual lifestyles, learning preferences and personal development plans. (p. 2)

Furthermore, the United States Distance Learning Association (n.d., http://www.usdla.org/) defines distance education as the "acquisition of knowledge and skills through mediated information and instruction, encompassing all technologies and other forms of learning at a distance."

With the arrival of the Internet, the term "electronic" has entered the public domain in a new way. It has become an adjective to describe information that is technology generated such as telephone, fax, teleconferencing, e-mail, and e-files. This term has now been applied to distance learning. "A new term, 'e-learning,' has been coined to try to describe the many forms of technology-supported learning currently being practiced worldwide" (Wheeler, 2007, p. 2). E-learning is most commonly used to describe learning that uses computers and the Internet.

The definitions of distance education have evolved to reflect the history of distance education. In the following section of the literature review, an overview of the significant historical developments in distance education is provided.

Historical Overview of Distance Education

Distance education and online learning have developed with the evolution of technology. A historical review of distance education and online learning provides interesting insight into how distance education developed globally and reflects both the development of technology and societal needs.

The first documented evidence of distance learning can be credited to the Apostle Paul who provided instruction in Christianity from a distance by letter, even when he was under house arrest in Rome (Wheeler, 2007). Until the 20th century, educators relied on print as the sole medium for distance education. Combining printed material with the postal service provided the opportunity for the facilitation of correspondence courses. The earliest evidence of correspondence courses is found in an advertisement in the *Boston Gazette* in 1728. Caleb Phillips, a shorthand teacher, offered weekly lessons by mail to interested students who wanted to learn shorthand, but lived outside the city. The earliest evidence of higher education-establishing correspondence courses occurred over 100

years later in 1833 when a Swedish university offered the opportunity to study writing composition by using the postal service as a way to communicate with students (Bower & Hardy, 2004).

The 1840s and 1850s marked further developments in distance education in Europe. In 1840, Isaac Pitman of England used postcards that were mailed to students to teach shorthand, which lead to the establishment of the Sir Isaac Pitman Correspondence Colleges. In 1856, a language correspondence school was started in Berlin by Toussaint and Langenscheidt (Bower & Hardy, 2004). In the United States, similar developments in distance education were taking place within institutions of higher education. In 1874, Illinois Wesleyan University became the first institution to grant undergraduate and graduate degrees through the use of correspondence courses (PHI Wiki, 2006). In 1886, Pennsylvania State University established its first distance learning networks using the US postal service to communicate with its students (Wheeler, 2007). Throughout the late 1800s and early 1900s, correspondence schools spread rapidly, particularly in Britain and the United States (Bower & Hardy, 2004).

While it appears that during the turn of the century most distance education programs were being offered under the auspices of higher education, several notable programs took place outside the governance of post-secondary institutions. In 1873, Anna Ticknor of the United States founded the Society to Encourage Study at Home. This program was designed for women who were at home and provided a modern program of study that was self-paced. Students of the Boston-based program were supported by educated female "correspondents" who assisted by providing personalized instruction and guided readings and by offering frequent exams to assess the learners' understanding of the material. To address the learning needs of coal miners who wanted to move their careers forward, Thomas J. Foster developed and offered engineering courses by distance, which began the International Correspondence School (ICS) based in Scranton, Pennsylvania. ICS enrolled over 250,000 students in its first 10 years of operation and by 1894, ICS had enrolled students from Mexico and Australia, in addition to the United States. The institution still exists today.[1] Both the Society to Encourage Study at Home and ICS are examples of distance education that began outside the realm of higher education institutes.

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1   As of 2006, "Education Direct" is called *Penn Foster Correspondence School* in the United Stats, *ICS Canada* in Canada, and *Penn Foster Global* in all other international locations. See http://www.penn-foster.com/

The next significant event in the history of distance education occurred in the mid-1940s. In the aftermath of WW II, the United States introduced the Servicemen's Readjustment Bill in 1944. The Bill made provisions for college or vocational training for soldiers returning home. This created an increased value in post-secondary education and significantly increased student enrolment. Universities were forced to re-think how they delivered lectures and courses. Correspondence education was one method that was used to ease the strain on traditional classrooms and enrolment in correspondence courses greatly increased (Pauls, n.d.).

During the 1920s to the 1950s, limitations in the postal system and advances in technology led to the use of radio and television broadcasts for learning. In the 1930s, the United States experimented with broadcasting technology, but it was not until the 1950s that Western Reserve University began to offer a regular series of television courses (Bower & Hardy, 2004). Both television and radio courses were one-way communication, allowing the instructor to present information, but providing no opportunity for interaction with the student.

In the 1960s, the United Kingdom established "The University of the Air," which later became the "Open University." Originally, the institution was established to offer degree programs through radio and television in partnership with the British Broadcasting Corporation. First, print-based materials and later, computer technology, became increasingly important as components of the distance delivery mechanisms (Wheeler, 2007). The establishment of the Open University sparked similar initiatives around the globe and established distance education as a recognized, legitimate method of learning (Bowers & Hardy, 2004).

During the 1970s, three new institutions were established in Canada which were designed to offer credit and non-credit courses by distance education: Athabasca University, Tele-Université de Quebec, and the Open Learning Institution of British Columbia[2]). It is interesting to note that the unconventional methods used by these institutions may have been met with some reserve by other institutions and learners. As Moran (1991) describes:

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2   As of April 1, 2005, British Columbia Open University (BCOU) became a part of the newly created Thompson Rivers University (TRU), located in Kamloops, BC. From this date, BCOU is known as Thompson Rivers University, Open Learning or TRU Open Learning (TRU-OL). See **http://www.tru.ca/distance/**

> Their unconventional pedagogies, open admissions policies, pioneering use of telecommunications and other technologies, and modification of traditional organizational structures and financial structures and systems affected the nature, speed and degree of legitimacy afforded them, and their place in the local higher education hierarchy. (p. 2)

In the United States, the development of distance education continued to progress. In 1982, the first formal university correspondence division began at the University of Chicago (PHI Wiki, 2006).

As previously noted, the development of distance education and e-learning has been closely linked to the evolution of technology. In the 1960s, satellite technology was introduced, followed closely by the fibre-optic system in the late 1980s. Currently, many users of technology benefit from wireless technology, which enables access to the Internet without a physical connection. The availability of the Internet facilitated the delivery of online courses, with the first online course being offered in the early 1980s. The addition of new technologies such as audio and video conferencing, combined with widespread availability of the Internet, has facilitated explosive growth in distance education and e-learning. This growth includes the number of learners enrolled in programs, the types of programs available, and the types of technology used in the delivery of distance programs. In 2003, more than 1.9 million people in the United States were participating in online learning at post-secondary institutions (Wikipedia, 2007). According to a 1999 study on distance and online learning in Canada, an estimate of 200,000 registrants was considered conservative (Human Resources Development Canada, 1999).

When reviewing the historical developments of distance and e-learning, it is difficult not to think about the future potential of these learning mediums. One important consideration for future use is the effectiveness of using these tools. In the next section of this literature review, the benefits and challenges for distance, online, and e-learning is explored.

Benefits of Distance/Online Learning

Today's technology permits many individuals to engage in distance education and online learning. There are considerable benefits to providing distance education programs for both learners and learning organizations.

Accessibility

Perhaps the most widely accepted and cited reason for distance education is accessibility. Distance education removes the necessity for learners and facilitators to share the same learning space at the same time. This flexibility increases opportunities for learners to access courses and programs, and for learning organizations to deliver these courses. The Open Learning Institute of British Columbia, referred to since 1988 as the *Open Learning Agency,* was originally established in June 1978 to give "open access to education to people hitherto inhibited from study by geographic, social or economic isolation or by traditional requirements" (Moran, 1991, p. 2). Matthews (2002) notes that in post-secondary education, the intent of distance education was not so much to challenge or change the structure of higher learning, but to extend the traditional university in order to overcome its inherent problems of scarce resources and exclusivity. There are many notable examples of individuals accessing education by distance when their circumstances would have otherwise prevented them from participating. For instance, Nelson Mandela studied by correspondence with the University of South Africa while he was imprisoned (Wheeler, 2007).

Life Style Needs of Learners

Distance education provides an opportunity for adults to incorporate learning into the fabric and rhythm of their lives, without the restrictions of being in a classroom at a certain time. According to the PHI Wiki (2006), "Online course work presents a solution to individuals with busy schedules and family responsibilities who are unable to participate in traditional classroom instruction," including adults with family responsibilities and non-traditional work schedules. In addition, distance education means no commuting time to and from learning sessions, which can be very important to learners who live further away from traditional learning institutions.

Collaborative Learning

Collaborative learning is a process through which participants learn as much from others in the learning groups as they do from the instructor and the curriculum (Rowntree, 2007). Owens and Luck (2006) further describe collaborative learning as "a natural process of social interaction and communication [whereby] using problems to define the curriculum, students acquire necessary knowledge and skills" (p. 314). Zhang and

Ge (2006) report that "peer group work has significant learning impacts on varied learning outcomes in both face-to-face and online learning environments" (p. 99). Specifically, Rowntree quotes a learner who described the benefits of collaborative learning in an online course, saying:

> The benefits of collaborative learning were derived from taking part in a developing conversation where many of the replies were much more considered than might have been the case had the same people met and talked together over several hours. Questions were raised, answered, developed, returned to and reconsidered in a much more polite and considerate manner than would have been the case in the face-to-face situation. (p. 3)

Online learning technology can provide the opportunity to enhance the learning experience for learners by facilitating collaborative learning. Green (1998) notes collaborative learning can be created by an established welcoming environment and positive feedback to learners. This provides concrete evidence that participants' input is valued.

Collaborating learning is based in the constructivist philosophy of adult education, which encourages learners to actively build new knowledge. For collaborative learning to occur, facilitators of learning must accept this philosophy and promote opportunities for this collaboration to take place.

Promotion of Reflective Discussion

Often in the delivery of distance education there are mechanisms that allow learners to post messages and to discuss ideas with other learners asynchronously. Because these activities do not always occur in real time, as in the traditional classroom, this can benefit the learners. "The advantage of CMC [computer-mediated communication] is that it bridges time and distance and can promote deeply reflective discussion…" (Herod, n.d., p. 7). When learners have an opportunity to critically reflect on ideas and concepts, deeper meaning can be achieved and the quality of the learning experience can be improved. Garrison, Anderson, and Archer (1991) have shown that this reflection may not happen without careful moderation and teaching presence.

Development of New Literacies

In today's technologically advanced world, having an understanding of commonly-used technology is often considered when defining "literacy." Labbo (2006) supports this concept, stating "new computer technologies and the resulting new forms of electronic texts such as email and multimedia websites require new conceptions of literacy and literate behaviours" (p. 200). Distance education and online learning, therefore, provide the added benefit of assisting learners to experience, understand, and develop these emerging literacy skills. "Through studying online, students have the opportunity to experience and evaluate on-line learning 'from the inside,' which itself constitutes part of their learning…" (Pennells, 2003, p. 164).

Challenges of Distance/Online Learning

While the benefits of distance education are great, there are also a number of challenges to be considered for both learners and learning organizations.

Facilitators Need Technical Expertise

In addition to time and effort, instructors need technical expertise and instructional design skills to develop distance and online programs (Bower & Hardy, 2004). In describing the facilitation of a session using a synchronous system, Hofmann (2004) highlights some of the features available in learning technologies, including audio, text chat, breakout rooms, surveys, live and pre-recorded video, white boards, and evaluation features. Hofmann encourages facilitators to understand each feature and "make it a priority to master the potential of these powerful options" (p. 13). Bowers and Hardy (2004) agree, asserting that support and training for facilitators is necessary for the success of distance education. Yet technical expertise can be equally as challenging for participants as it is for facilitators. In describing her experience with facilitating an online course, Green (1998) notes:

> In the process, we discovered the myriad of technical problems that can discourage people from participating—everything from not knowing how to use their Web browser to confusion over the conference interface. Don't assume that the medium is as transparent for everyone as it is for you. (p. 11)

In post-secondary institutions, there are often support services to assist facilitators and learners to understand the technical features of learning technologies. Yet this begs the question of how communities, volunteers, and organizations that struggle with resources gain access to the technical information required to facilitate or to participate effectively in learning which incorporates technology.

Labour Intensity

Distance education courses require considerable investment of time and expertise from facilitators to be effective. Traditional courses cannot simply be posted on the Internet with the expectation that effective learning will occur. "Distance education is more time-consuming … It takes an average of 18 hours of personal time to create one hour of stand-alone Web-based instruction. This is a two to fourfold increase over a traditional classroom lecture" (Matthews, 2004, p. 9). Learning organizations must be prepared to invest both time and labour into the development of distance and online learning activities and programs.

Maintaining Sufficient Learner Contact

In distance education, facilitators are challenged to provide timely assistance and adequate performance feedback (Matthews, 2004). In many web-based courses, facilitators and learners will never meet face-to-face, relying on e-mail and discussion boards as their primary method of communication. As Hardy and Bower (2004) discuss, electronic communication removes body language and tone of voice cues from the communication process, which can lead to misinterpretations when participants decode text. Walther (1996) notes some adult learners communicate with "strategic impersonality" in distance education, opting to reduce or remove personal content from their communications. Furthermore, feedback on learning must be provided differently than in a traditional classroom, requiring facilitators to be strategic about the method of delivering the feedback to learners (Hardy & Bower, 2004). The facilitator of online learning must be able to provide feedback to learners in a way that is meaningful to the learner and congruent with the course outcomes.

Access to Technology

For those who regularly use technology for communication and learning, it may be difficult to imagine the world without this access. There are many instances, however, both nationally and globally, where individuals do not have any or lack adequate access to technology. "The situation

in which one group of people use [computer technology and the Internet] having the necessary skills, interest/motivation, and resources (hardware, access) to varying degrees, and another that doesn't" (Chang Barker, 2006, p. 13) is referred to as the digital divide. Interestingly, there is evidence that the digital divide is widening, a reflection of the increasing gap between the "haves" and "have-nots" in Canada. Higher income homes are more likely to have access to the Internet. The cost of connectivity is a major limiting/restrictive factor for lower income households (Chang Barker, 2006). Watson (2004) also discusses the relationship between demographics and access to technology, noting the wealthier a person is, the more likely he or she is to have access to technology. These ideas have significant implications for the literacy community as "outmoded technology was identified as a major challenge among community-based projects" (Office of Learning Technologies, 2005). Many literacy providers in Canada struggle to deliver programs using inadequate finances, and literacy learners tend to have less access to the labour market, resulting in lesser personal financial resources.

Watson (2004) also provides an interesting 4-stage model for new users of technology, categorized as follows:

> The first stage is recognizing that technology could enhance proficiency, productivity, or equality of their personal and professional lives. The second stage is becoming open to learning about information and learning to apply hardware and software to the task at hand. In the third stage, users seek physical access to an appropriate technological infrastructure. In the fourth stage, users actively follow through on the decision to use technology. (p. 32)

This model is useful for facilitators of online learning to assess where learners are in their personal digital divide regarding technology.

Transactional Distance

Attending traditional classes exposes learners to social behaviours as well as learning behaviours. Removing the face-to-face social interactions in learning can create a fascinating dynamic for learners which has been termed "transactional distance." Transactional distance "refers to more than physical distance, but also the interactions and behaviours which occur in a classroom environment that students are missing out on" (PHI Wiki, 2006). Facilitators are challenged to create social interactions with and among their learners using technology that may or may not

be in real time. For many adult learners, social interactions that occur in learning environments are very important aspects of the overall educational experience. Mismanaged social interaction can result in participants feeling isolated and removed from the learning experience. The challenge for facilitators and developers of distance education and e-learning is to appropriately manage transactional distances to maximize the effectiveness of learning.

Cost

There are many costs associated with the provision of distance education, including the acquisition of technology, software, and the development of courses and materials. In addition, the costs are ongoing and require continued investment as technology advances (PHI Wiki, 2006). Rossiter (2006) states that "access to adequate funding to ensure effective integration of and implementation by providing the needed tools (software and hardware)" (p. 16) can be a significant barrier in adult learning. There is some evidence, however, that suggests when set up costs have been expended, the cost of training per user is significantly reduced as the course can be duplicated with little additional costs (Wikipedia, 2007).

Apprehension among Learners

It is important to adhere to the principles that guide adult learning to ensure successful learning (Office of Learning Technologies, 2005). It can be expected that adult learners using technology that is unfamiliar to them may have some feelings of apprehension regarding this type of instruction. The Office of Learning Technologies (2003) notes that some learners have reported feeling intimidated when using technology, which created a barrier to participation. In addition, the Office of Learning Technologies (2003) reports how users with inadequate technical skills can become frustrated while participating in online learning, which in some cases, can lead to their avoidance of the learning program. It is the role of the facilitator and program developers to develop strategies and learning opportunities that will reduce these fears and facilitate a level of comfort and skill with the technology.

Accommodating Individual Learning Needs and Styles

Much has been written about the importance of understanding and accommodating learning styles in adult education. The Office of Learning Technologies (2005) reminds developers and facilitators of distance education programs that distance learners also have unique

learning styles. Without visual cues and face-to-face interaction, it might be more challenging to determine these styles. The Office of Learning Technologies notes that facilitators should "recognize that no two learners require the same level of guidance" and that it is important to "honour cultural and heritage learning differences" (p. 17). Martz and Shepherd (2002) discuss the Learning Centred Education model, where a partnership is created between the facilitator and the learner. The facilitator identifies learning outcomes and the learner helps to identify how this learning will occur. Pauls (n.d.) suggests a number of interactive tools that can be used in web-based instruction to address different learning styles including the following: creating a virtual student, role playing, having students build content, going on online field trips, and hosting debates. Fahy and Ally (2005) note that in online communication, learning styles gently influence interaction patterns more than they rigidly control them.

Need for e-learning Guidelines

Our review of the literature did not reveal any documentation of governing bodies for distance education. Learning institutions and organizations have been left to their own ingenuity to create guidelines for distance learning. As a result "there is far too much variability in the quality of eLearning and absolutely no regulations" (Chang Barker, 2006, p. 1). Because distance education is an emerging and relatively new phenomenon, recent research on effective e-learning is being published. Chang Barker (2006) supports the coordination of eLearning in Canada to reduce the continuation and duplication of fragmented, costly, and experimental development of best practices. Currently, the onus appears to lie with each organization to discover what will be effective within their context. Attention must also be paid to completion statistics, as participants in online learning are the best indicators of the adequacy of online programming.

Facilitation Skills

There is much evidence that facilitating learning using technology requires skills different from those used in face-to-face instruction. Course content, teaching methods, assessment strategies, interaction and communication are all different in distance education than the traditional classroom (Bower & Hardy, 2004). In addition to traditional teaching skills, Hofmann (2004) states facilitators of synchronous online training need to be able to foster collaborative learning, promote online training,

be dynamic in their presentation, thrive under stress, be able to multi-task, and have experienced online learning first hand. The Office of Learning Technologies (2003) notes that the facilitator is instrumental in the success of online learning programs and is responsible for promoting participation, resolving technical issues, "and facilitating learning through an understanding of the local context" (p. 16). Community Literacy of Ontario (1999) concurs, stating: "The technical and adult educator roles are both vital, but very separate roles. You will need both to successfully conduct an online workshop" (p. 27). Becoming an effective facilitator of online learning requires specialized skill development.

Distance Education Requires Innovative Learner Support

The term learner support "refers to a variety of non-academic interactions that a student has with the learning institution" (Floyd & Casey-Powell, 2004, p. 56). Learner support has two distinct categories: Administrative support including admissions, registration, and fee payment; and support for learning, including areas such as technical support, advising, and learning resources (O'Rourke, 2003). Lebel (1989) categorizes supports for learning into four areas: (a) Cognitive, helping individuals enhance their knowledge; (b) Metacognitive, developing learning strategies; (c) Affective, supporting a learner's feelings; and (d) Motivation, encouraging learners to attain their goals. Floyd and Casey-Powell conclude that traditional student support services must be redefined for distance learning, and "reframed to incorporate strategies that meet the needs of a technologically oriented student population" (p. 62).

Undoubtedly there are challenges for organizations to provide distance education and e-learning. In 2005, literacy organizations faced additional challenges as they were "somewhat behind in the adoption and development of technology resources ... [and] economic considerations remained a major impediment" (Chang Barker, 2006, p. 5). Chang Barker notes there has been a recent improvement in this situation; however, "eLearning, in the overall delivery of literacy programs and services, is relatively new" (Chang Barker, p. 6).

There are many questions to consider. How can literacy program staff develop the technical and facilitation skills required to effectively participate in distance learning? What are the options for gaining cost-effective access to technology? How can literacy organizations learn best practices in distance learning from each other? In the following section, the current research on literacy and distance learning is examined.

Literacy and Online Learning

The use of technology for learning serves many purposes for both learners and literacy practitioners in the literacy community, including sharing resources, exchanging ideas, networking, delivering courses, and researching practices. In the following paragraphs, some examples of how the literacy community makes use of technology for learning are provided.

There is an abundance of examples of English language, Internet-based shared resources for literacy learners covering a wide range of topics. Some examples of online literacy resources include *The Learning Edge,* an online newspaper for new adult readers (www.thewclc.ca/edge), AAA Math, a website that provides instruction and practice in basic math concepts up to grade 8 (www.aaamath.com), and GCFLearnFree.org, which, among other topics, provides online interactive lessons for learners who want to upgrade their computer skills (www.goodwilltraining.org). Many of these websites are reviewed in *CONNECT: Canada's Resource Publication on Technology and Adult Literacy,* a publication available at the National Adult Literacy Database (NALD) website (www.nald.ca).

Technology provides the literacy community with the ability to establish forums to share information and exchange ideas. Examples of such forums are SHARE (http://www.literacyalberta.ca/), The Hub (http://www2.literacy.bc.ca/electric.htm), and North of 60. The first two sites are organized and maintained by regional literacy coalitions, the third by the territorial government. Users of these websites register to become a member. Literacy practitioners can expect to find updated information on all aspects of literacy relevant to the geographic area represented, including information on specific literacy organizations, upcoming professional development opportunities and conferences, resources, new program ideas, book reviews, and learner forums (McCargar, n.d.). Discussion boards facilitate networking among users of these forums.

Learning technologies are also used for professional development to assist literacy practitioners to acquire new or enhance existing skills. The Illinois Literacy Office offered volunteer tutors an online tutor-training program that had both technical support and information on how to be an online learner. The program included content on the relationship between the tutor and the learner, instructional techniques, assessment and documentation (Illinois Literacy, 2006). The *Writing Out Loud* professional development online training program, for example, engaged literacy practitioners from across Canada in developing skills in the area

of teaching writing (www.writingoutloud.ca). Community Literacy of Ontario (CLO) offers a free, self-directed program entitled Literacy Basics for literacy practitioners (http://www.nald.ca/literacybasics /index.htm). This program is housed online at the National Adult Literacy Database (NALD). The program includes modules such as assessment, learner recruitment, and learner retention (CLO, n.d.). The Community Literacy of Ontario organization has offered staff, directors, and volunteers online training in board-staff relations. From this experience, CLO published a report on how to develop and deliver online training (Kaattari, 1999).

Learning Needs of Literacy Practitioners for Distance/e-learning

The issues related to distance education and e-learning are both broad and deep. Literacy practitioners may engage in online learning as participants for their own professional development, as instructors to facilitate online courses, or to encourage learners to use technology to support their literacy development. An overview of the needs of literacy practitioners to fully participate in distance and online learning is presented below.

To Experience Supportive e-Learning

It would be quite challenging—if not impossible—for literacy practitioners to promote or use online learning without personal experience of learning by distance using some form of technology. Rowntree (1995), in recounting his personal experiences with online teaching, states: "Perhaps the best way in [to online tutoring] is to go through the experience of learning as a student in an online course" (p. 7). The University of Bridgeport encourages their faculty to experience online learning first before delving into teaching online (University of Bridgeport, 2007). This advance experience with e-learning can demystify the process for practitioners, as well as introduce them to the possibilities of e-learning. A participant from the *Writing Out Loud* online training program wrote, "Distance education is all the rage right now. I needed to see for myself what distance ed felt like, and what the benefits and barriers are" (Fahy, 2002, p. 5).

There is some evidence that following personal experience with online learning, some facilitators will organize and facilitate their own online courses. For example, following participation in a *Writing Out Loud* online training program for literacy practitioners, staff from The Red Lake District Adult Learning Centre developed and offered an online writing circle for learners from four Northern Reserve communities

in Ontario (Mochrie, 2003). In addition, a literacy tutor from Illinois reported that participating in the online course exposed her to a variety of technology-based resources that she would incorporate into her tutoring (Illinois Literacy, 2006). Experiencing e-learning as a learner is an important first step in introducing distance education and e-learning to those who may continue to use the technology for professional development and literacy development.

To Understand the Technology and How It Can Support Distance and e-Learning

While it is probably not necessary that literacy practitioners understand the internal workings of each piece of technology used in distance and e-learning, it is important that the capabilities and features of the system are understood so that learners and facilitators can obtain maximum benefit for learning. For individuals new to technology, this can be intimidating. Some learners report feeling embarrassed when they encounter a steep technology learning curve and may feel that everyone else participating has more technical knowledge than them (Milhauser, 2006). This may cause people to avoid using technology for learning. A partial solution to overcoming these obstacles is ensuring "that participants have the right equipment and software and are able to communicate with the central computer" (Rowntree, 1995, p. 5). Keeping technical difficulties to a minimum can reduce frustration for learners and enable them to access learning with greater ease.

Literacy practitioners will also need to make decisions about instructional technology, including what type to use and the most effective way to use the technology for optimum learning. In addition, there are considerations for software. Chang Barker (2007) quotes Middleton, who explains "Desired features in instructional software include authoring capabilities, an adult orientation, appropriate reading level, collaboration and interaction possibilities, Canadian content voice-activated software, audio components, feedback, evaluations or quality assurance, and affordability" (p. 6). Having an understanding of instructional technology and software is an important learning need for literacy practitioners.

To Understand Course Development in the e-Learning Context

"When designing systems and materials for delivery by distance education, teachers must consider not only learning outcomes, but also content requirements and technical constraints" (Wheeler, 2007, p. 4). Within e-learning, there are options for synchronous (requires participants to

be online at the same time), asynchronous (allows participants flexibility to participate at anytime), and blended learning (participants meet both face-to-face and online) (OLT, 2003). Course developers must consider which of these options should be used. Wiesenberg and Hutton (1996) identify three significant challenges for online course developers to consider: accommodating the increased time to design and deliver the course, which is approximately two to three times more than a traditional course; creating an online community that promotes collaborative learning; and encouraging self-directedness among learners. Schum and Benson (2003) note that both active and independent learning must take place in distance education. Course designers:

> will have to determine what actions will promote this type of learning. Further, from adult learning theory, it is clear that authentic learning, relevant materials, and negotiated assignments are required to ensure the participation, involvement, and action necessary to meet these goals. This is an ideal opportunity to create a Development Team, composed of a Subject Matter Expert, an instructional designer, and at least one person with experience in distance education. (Schum & Benson, 2003, p. 193)

Distance and e-learning require course developers to consider the context of learning through technology to achieve learning outcomes.

To Understand and Develop Effective Online Facilitation Skills

Throughout the literature on distance education and e-learning, there are many references for the need to develop specialized facilitation skills. Dooley and Magill (2004) describe a study conducted in 2001 by Dooley and Murphy, in which "over one half of faculty respondents who facilitated online courses disagreed or strongly disagreed with the statement, 'I am familiar with the teaching methods appropriate for distance learning.' " (p. 80). This realization can create a steep learning curve for facilitators, who may discover "that they need to develop a new set of skills if they are to be effective educators, which has obvious professional development implications" (Wheeler, 2007, p. 5). Rowntree (2007) emphasizes the importance of these specialized facilitation skills which are different than traditional teaching skills such as lecturing or presenting knowledge. Rowntree argues the online facilitator must have skills in "engaging the learners in coming to terms with the concepts and taking ownership of them in their own ways" (p. 6). Green (1998)

adds that online facilitators must also be skilled at managing interaction, adjusting the pace, and providing closure. From these discussions, it is evident that the effective use of learning technologies requires the development of e-learning facilitation skills.

To Understand and Develop Skills to Build an Online Community

Building a sense of camaraderie among participants will likely enhance their learning experience. In an evaluation of *Writing Out Loud* online training, Fahy (2005) notes: "For the most part, participants felt they were members of a group with a common objective, values, and goals" (p. 19). How can these connections to the facilitator and other participants be established in a virtual or distant context? Rowntree (2007) discusses the importance of the social tasks of the facilitator including "setting the tone of the discourse, establishing an etiquette, and promoting mutual respect between participants" (p. 6) as well as moderating disputes. Green (1998) adds the importance of establishing trust by acknowledging and affirming participation. This author notes that many people feel vulnerable when first contributing to an online discussion and goes on to suggest that providing positive feedback can reduce these feelings of exposure.

One emerging method of building an online community is through the cohort model. A cohort model incorporates:

> more active, cooperative and collaborative learning strategies than more traditional methodologies. The structure of a group of students who enter and complete the program through a series of common learning experiences over a period of time respects the self-directed aspects of the adult learner and provides the context in which social support can nurture learning. (Saltiel & Russo, 2001, p. viii)

The use of cohorts for effective distance and e-learning has significant implications that will undoubtedly be explored through further research.

To Understand and Develop Skills to Provide Learner Support

The literature suggests that providing learner support is a very important and challenging component of distance and e-learning. Mills (2003) indicates learner support "is the totality of the provision of an institution to support the learner" (p. 104) outside of the actual course content. For literacy practitioners who often work in community-based organizations

without the support of a student services division, it may be challenging to anticipate the supports participants of e-learning would require. Additionally, practitioners would then be challenged with how to address these supports. There may be a role for the cohort of learners to support each other as well. Providing distance and e-learning requires special consideration within the context of the literacy community.

To Increase Their Knowledge of Professional Development Opportunities for e-Learning

In the literacy field, Chang Barker (2006) reports there are some recent changes in the delivery of e-learning, and states:

> eLearning service providers are moving away from direct instruction to services such as the ePortfolio, chat rooms, and just-in-time training for both learners and program providers. Information-based online communities now blend formal, informal and non-formal learning — learning not based on the rote, skill building and reiteration of traditional instruction but incorporating developmental attributes associated with adult learners, interactive and generative instructional models, supportive and participatory communication… the learning that takes place is more transformative, inclusive of life experience, rewarding, and accommodating of diverse learning styles. (p. 6)

From Chang Barker's research, it is evident that e-learning is expanding in depth and breadth. She notes that the concept of e-learning in the literacy field is relatively new. E-learning is also a new phenomenon that is already undergoing significant changes in delivery and philosophical underpinnings.

> It is important to note that eLearning, in the overall delivery of literacy programs and services, is relatively new. The inventory in literacy and in other education/training endeavours is relatively narrow but expanding. What is most interesting is the innovation the eLearning represents — new ways to do old things as well as different ways to do different things. (Chang Barker, 2006, p. 6)

These statements indicate there is much for literacy practitioners to learn to fully and effectively engage in distance and e-learning. Chang Barker

(2006) notes that to be an effective facilitator of e-learning for learners, literacy practitioners must fully understand all dimensions of distance and e-learners, including the technology, effective online program development, the creation of online communities, the development of online facilitation skills, and effective learner supports.

Conclusions

The literature indicates that technology has created many possibilities for distance and e-learning. Specialized skills are required to be an effective distance education and e-learning facilitator and/or learner. Literacy practitioners in Canada could benefit from customized learning events, incorporating the context of the literacy community, to develop distance education and e-learning skills. Given that distance and e-learning is relatively new in the literacy field, a future survey of literacy practitioners and organizations determining their professional development needs, as well as their interests, expectations, and reservations could assist in shaping the development of a distance and e-learning program for the literacy community. Providing literacy practitioners with tools and skills to be effective online learners and facilitators holds many exciting possibilities for the literacy community including increasing networks among practitioners, increasing practitioners' skill levels, and strengthening programs. These developments will be important contributions to the improvement of literacy rates in Canada.

References

ABC CANADA. (2005). *International adult literacy and skills survey.* Retrieved August 20, 2007, from www.abc-canada.org/media_room/media/iasll_summary_nov_05.pdf

Bower, B., & Hardy, K. (2004). From correspondence to cyberspace: Changes and challenges in distance education. In B. Bower & K. Hardy (Eds.), *From distance education to e-learning* (pp. 5–12). New Directions for Community Colleges, No. 128. San Francisco: Jossey-Bass.

Canadian Council on Learning. (2007). *State of learning in Canada: No time for complacency.* Retrieved June 26, 2007 from http://www.ccl-cca.ca/CCL/Reports/StateofLearning/StateofLearning2007.htm

Chang Barker, K. (2006). *Linking adult literacy and eLearning: What needs to be done.* Retrieved June 27, 2007, from www.FuturEdNews.blogspot.com

Community Literacy of Ontario. (n.d). *Literacy basics.* Retrieved August 21, 2007 from www.nald.ca/literacybasics

Dooley, K., & Magill, J. (2004). Faculty perceptions and participation in distance education: Pick fruit from the low-hanging branches. In R. Discenza, C. Howard, & K. Schenk (Eds.), *The design and management of effective distance learning programs* (pp. 75–82). Hershey, PA: IRM Press.

P. Fahy Consulting. (2002). *Write to learn training project survey.* Edmonton, AB: Author.

P. Fahy Consulting. (2005). *Post-training survey results: Writenet training project-survey 2.* Edmonton, AB: Author.

Fahy, P. J., & Ally, M. (2005). Student learning style and asynchronous computer-mediated conferencing. *American Journal of Distance Education, 19*(1), 5–22. doi: 10.1207/s15389286ajde1901_2

Floyd, D., & Casey-Powell, D. (2004). New roles for student support services in distance learning. In B. Bower & K. Hardy (Eds.), *From distance education to e-learning* (pp. 55–64). New Directions for Community Colleges, No. 128. San Francisco: Jossey-Bass.

Garrison, D. R., Anderson, T., & Archer, W. (2001). Critical thinking, cognitive presence, and computer conferencing in distance education. *The American Journal of Distance Education, 15*(1), 7–23. (EJ643385). Retrieved June 13, 2007, from http://communitiesofinquiry.com/files /CogPres_Final.pdf

Green, L. (1998). *Playing croquet with flamingos: A guide to moderating online conferences.* Vancouver, BC: Office of Learning Technologies, Government of Canada. Retrieved July 4, 2007, from http://www.emoderators.com/moderators/flamingoe.pdf

Hardy, K., & Bower, B. (2004). Instructional and work life issues for distance learning faculty. In B. Bower & K. Hardy (Eds.), *From distance education to e-learning* (pp. 47–54). New Directions for Community Colleges, No. 128. San Francisco: Jossey-Bass.

Herod, L. (n.d.). *Online collaboration in adult literacy: Part 1.* (Unpublished manuscript).

Hofmann, J. (2004). *The synchronous trainer's survival guide: Facilitating successful live and online courses, meetings, and events.* San Francisco: Pfeiffer.

Illinois Literacy (2006, Winter). *Online tutor training pilot a success.* Springfield, IL: Illinois State Library.

Kaattari, J. (1999). *Tips and tools for developing and delivering an online workshop. Report on the Online Workshop on Board–Staff Relations.* Barrie, ON: Community Literacy of Ontario. Retrieved August 4, 2007, from **http://www.nald.ca/library/research /tiptool/Workshop.PDF**

Labbo, L. (2006). Literacy pedagogy and computer technologies: Toward solving the puzzle of current and future classroom practices. A*ustralian Journal of Language and Literacy, 29*(3), 199–209.

Lebel, C. (1989). Le support à l'étudiant en enseignement á distance. *Journal of Distance Education, 4*(2).

Martz, W., & Shepherd, M. (2002). A preliminary exploration of social needs in distance education. In R. Discenza, C. Howard, & K. Schenk (Eds.), *The design and management of effective distance learning programs* (pp. 108–122). Hershey, PA: IRM Press.

Matthews, D. (2004). Distance education: What is it? In R. Discenza, C. Howard, & K. Schenk (Eds.), *The design and management of effective distance learning programs* (pp. 1–20). Hershey, PA: IRM Press.

McCargar, D. (n.d.) Sharing online with eLit.ca. *CONNECT, (5)*2. Retrieved September 2, 2007, from **http://www.nald.ca/connect/v5i2/db/website1.htm**

Milhauser, K. (2006). The voice of the online learner. In A. de Figueiredo & A. Afonso (Eds.), *Managing learning in a virtual setting: The role of context* (pp. 219–236). Hershey, PA: Information Science Publishing.

Mills, R. (2003). The centrality of learner support in open and distance learning: A paradigm shift in thinking. In A. Tait & R. Mills (Eds.), *Rethinking learner support in distance education* (pp. 102–113). London: Routledge-Falmer.

Mochrie, C. (2003). *The writing circle: A handbook for online writing circles.* Red Lake, ON: Red Lake District Adult Learning Centre, National Adult Literacy Database. Retrieved June 28, 2007, from **http://www.nald.ca/clr/circle/WritCirc.pdf**

Moore, M. (1972). Learner autonomy: The second dimension of independent learning. *Convergence, 5*(2), 76–88. (EJ064957)

Moran, L. (1991). *A social history approach to research in distance education.* Victoria, AU: Deakin University Book Production Unit. (ED342372)

Office of Learning Technologies. (1999). *Open learning and distance education in Canada.* Ottawa, ON: Government of Canada. Retrieved September 12, 2008, from http://olt-bta. hrdc-drhc.gc.ca

Office of Learning Technologies. (2003). *Balancing product with process: Outcomes and emerging practices in e-learning.* Vancouver, BC: Government of Canada. Retrieved July 24, 2007, from http://www.hrsdc.gc.ca/en/hip/lld/olt/Skills_Development/OLTResearch /balancing_product.shtml

Office of Learning Technologies. (2005). *Learning and skills development through technology: Outcomes and best practices.* Gatineau, QC: Her Majesty the Queen in Right of Canada. (HIP-030-01-05) Retrieved July 6, 2007, from http://www.hrsdc.gc.ca/en/hip/lld/olt/Skills_Development/OLTResearch/ learning_through_technology/learning_through_technology.pdf

O'Rourke, J. (2003). Lost and found: Opening learning outside the doors of academe. In A. Tait & R. Mills (Eds.), *Rethinking learner support in distance education* (pp. 142–154). London: Routledge-Falmer.

Owens, T., & Luck, P. (2006). Building a learning community online. In A. de Figueiredo & A. Afonso (Eds.), *Managing learning in virtual settings: The role of context* (pp. 309–321). Hershey, PA: Information Science Publishing.

Pauls, T. (n.d.). *The importance of interaction in online courses.* Retrieved July 2, 2007, from http://www.oln.org/conferences/OLN2003/papers/Importance_of_Interactivity_in_distance_Education _1.pdf

Pennells, J. (2003). Challenges in adjusting to new technology. In A. Tait & R. Mills (Eds.), *Rethinking learner support in distance education* (pp. 1155–1167). London: Routledge-Falmer.

Phillips, M. (2003). Delivering learner support online. In A. Tait & R. Mills (Eds.), *Rethinking learner support in distance education* (pp. 168–184). London: Routledge-Falmer.

Phi Wiki Project (2006). *Distance education.* Retrieved July 4, 2007, from http://phiwiki.wetpaint.com /Distance+Education?t=anon

Rossiter Consulting. (2006). *State of the field review in e-learning: Final report.* Ottawa, ON: Rossiter.

Rowntree, D. (1995). *The tutor's role in teaching via computer conferencing.* Retrieved August 3, 2007, from **http://iet.open.ac.uk/pp/D.G.F.Rowntree/Supporting%20online.htm**

Saltiel, I., & Russo, C. (2001). *Cohort programming and learning.* Malabar, FL: Krieger.

Schum, L., & Benson, A. (2003). Establishing successful online distance learning environments: Distinguishing factors that contribute to online courses and programs. In R. Discenza, C. Howard, & K. Schenk (Eds.), *The design and management of effective distance learning programs* (pp. 190–204). Hershey, PA: IRM Press.

United States Distance Learning Association. (n.d.). *Distance learning glossary,* Retrieved July 6, 2007, from **http://www.usdla.org/html/resources/dictionary.htm**

University of Bridgeport (n.d.). *7 simple steps to teaching your first online course.* Retrieved July 24, 2007, from **www.bridgeport.edu/scps/facultytraining.pdf**

Walther, J. B. (1996). Computer-mediated communication: Impersonal, interpersonal and hyperpersonal interaction. *Communication Research, 20*(1), 3–43. doi: 10.1177/009365096023001001

Watson, L. (2004). Access and technology. In B. Bower & K. Hardy (Eds.), *From distance education to e-learning* (pp. 31–38). New Directions for Community Colleges, No. 128. San Francisco: Jossey-Bass.

Wheeler, S. (2007). *Distance education: Why distance learning?* Retrieved June 28, 2007, from **http://www2.plymouth.ac.uk/distancelearning/vidconf1.html**

Wiesenberg, F., & Hutton, S. (1996). Teaching a graduate program using computer-mediated conferencing software. *Journal of Distance Education, 11*(1), 83–100. (EJ546300)

Wikipedia. (2007). *Electronic learning.* Retrieved August 25, 2007, from **www.en.wikipedia.org/wiki/E-learning**

Zhang, K., & Ge, X. (2006). The dynamics of online collaboration: Team task, team development, peer relationship, and media communication. In A. de Figueiredo & A. Afonso (Eds.), *Managing learning in virtual settings: The role of context* (pp. 98–116). Hershey, PA: Information Science Publishing.

getting online
THE GO PROJECT

External
Research
Report

A Research Report on Online Learning for Canadian Literacy Practitioners

getting online
THE GO PROJECT

Part 1
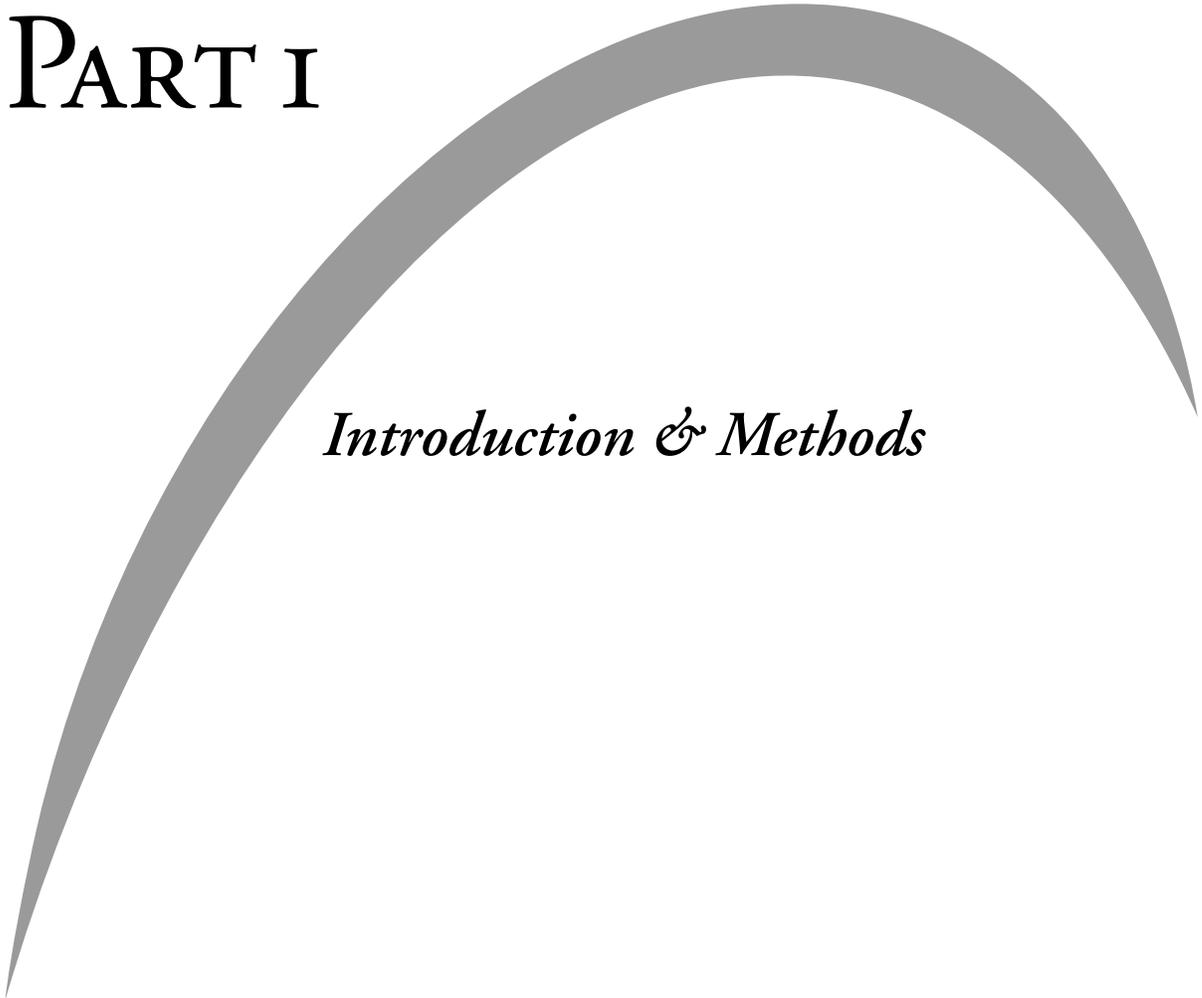
Introduction & Methods

Introduction

Within the overall GO Project goal of researching and identifying best practices for online learning and distance education, there were two external research goals:

1 To research how other similar, external fields of practice are using online learning technologies

2 To research what forms of online learning technology are being used

The GO team conducted extensive research on these two questions. Question One is summarized in Part Two of the External Research Report. Question Two is summarized in Part Three of this report. The research methods are described in Part One. Two GO team members, Joanne Kaattari and Vicki Trottier, were responsible for conducting this research into online learning in external (non-literacy) organizations.

External Research Methods

The External Survey

The full GO team had its first face-to-face meeting in May 2007, and a large part of the agenda involved planning the research processes, questions, and methodologies. At that meeting, they developed draft internal survey questions designed for literacy practitioners. Dr. Pat Fahy then refined these questions and they were approved by the Research Ethics Board (REB) of Athabasca University in late June 2007. Although the survey questions were originally developed for internal use, the questions were general in nature. Accordingly, for external purposes, the same survey questions were used; however, all references to literacy were deleted and the survey was applicable to external organizations involved in online learning. In accordance with standard ethical practices, survey respondents were ensured that the information collected would be held in the strictest confidence. The external survey was ready for circulation in early July 2007.

To support survey promotion, the team wrote a GO project backgrounder in June 2007 to give an overview of the project. Also in June 2007, they developed the GO website, **www.nald.ca/gettingonline**, which was then hosted by the National Adult Literacy Database. The GO website helped to share project information and added credibility to the

project's research goals and target audience.

The external survey questions were designed to collect respondents' feedback on the current tools and methods used by the organization for online training, the objectives of their online training, the results obtained, the different results produced by face-to-face and online training, how online training was introduced and supported, and their perceptions of the future of online learning.

The external research team used the external GO survey to collect demographic data from respondents. Respondents were asked what type of organization they represented (a not-for-profit organization or charity, university or college, school board, etc.); whether their organization was national, provincial, regional, or local in scope; the approximate number of people who accessed their organization's online training; and the size of their organization. Respondents were also asked to indicate whether they would like to participate in a more in-depth telephone interview, and as well, they were given the opportunity to make any further comments if they so desired.

GO external team members were responsible for researching how other fields of practice are involved in online learning. Accordingly, they sought to gain survey responses strategically and to find organizations from similar fields of practice that currently deliver online training, represent diverse regions of Canada, represent different sizes of organizations, and offer different types of online learning (blended, asynchronous, synchronous, accredited, informal, self-directed, etc.). Researchers also targeted organizations from related fields of practice to the Canadian literacy community, for example, not-for-profit organizations and educational institutions.

The external team conducted extensive Internet and print-based research into the online training offered by external organizations. The team used a variety of search terms such as: *online learning and training, distance education, distance learning, e-learning, emerging technologies, web-based learning, mobile learning, web 2.0,* etc. They also cross-referenced these terms with the names of all Canadian provinces and territories as well as the terms *not-for-profit, college, university, school board, government,* etc.

From this research, the external team identified 106 relevant Canadian organizations. These organizations formed a diverse cross-section of organizations involved in online learning. The external survey was sent out between July and November 2007 via a personalized email to a key

contact in each of the 106 external organizations. Key contacts were identified from the organization's website. Each targeted organization received the survey and a personalized email at least twice.

In total, 43 external organizations returned surveys. These organizations were involved in various online learning initiatives in diverse regions of Canada. The external team received responses from different types of organizations (universities, colleges, government, and not-for-profit organizations) that offer different types of online learning (academic, professional development opportunities, informal learning, emerging technologies, etc.).

The results of these surveys are summarized in Part Two of this research report.

Key Informant Interviews

In order to explore online training issues in a deeper manner, the external team held 19 key informant interviews with external organizations from July to December 2007. The majority of respondents were strategically selected from the organizations who responded to the external survey; however, to ensure all geographic regions of Canada were represented, a few respondents were selected who had not responded to the survey. All respondents, however, came from the 106 external organizations selected in the first phase of the research. Organizations from all regions of Canada were interviewed using a structured interview process approved by the Research Ethics Board of Athabasca University. Most interviews were held via the telephone but several were held in person.

Seven people participated in both the survey and the key informant interviews. Respondents to the key informant interviews were representative of diverse geographic regions of Canada, and diverse types of organizations including large, medium, and small organizations; not-for-profit organizations; colleges; universities; and school boards. In addition, the key informant interviews presented a diversity of learning contexts including accredited, unaccredited, synchronous, asynchronous, self-directed, and emerging technologies.

The external research team asked respondents to more fully describe the successes, challenges, and future of online learning from their perspective. The results of these external key informant interviews are summarized in Part Two of this research report.

External Website and Technology Research

The external team further analyzed the complete selection of 106 external websites identified during the research to address the second research question, i.e., to research what forms of online learning technology were being used. For each of the websites, they collated and analyzed information about the specific technology and the objective of the online learning or distance education being offered, along with demographic information. This analysis revealed a wealth of information about online learning in Canada and clearly shows the diversity of learning opportunities available. The findings from this research are examined in Part Three of this report.

Literacy Technology Survey

The external team also developed a literacy technology survey. This survey was designed to probe more deeply into the technology being used in the literacy community and its related benefits and drawbacks. The literacy technology survey provided an opportunity for respondents to indicate what platforms these literacy organizations had used to deliver online training; why they had selected that particular platform; what the strengths and weaknesses of the online learning platforms were; whether they would use this platform again; and what type of online learning features they would like to use in the future.

Using these technology survey questions as a basis, external researchers contacted leading Canadian literacy organizations who were already successfully delivering online training.

Eight Canadian literacy organizations participated in this technology research between August and November 2007. Four organizations submitted a written survey and the external research team held key informant interviews with the remaining four organizations.

The results of the literacy technology survey are included in Part Three of this research report.

Data Analysis

In December 2007, the external team merged all of this data and coded and analyzed the internal and external research data using ATLAS.ti, a powerful software tool for qualitative data analysis. They conducted further data analysis from January to April 2008.

This groundbreaking research into online learning practices in Canada formed the foundation for all future GO project deliverables including this research report, the Promising Practices manual, an online course, and the self-directed training modules on the GO website.

getting **online**
THE **GO** PROJECT

P_ART 2

How are other similar external fields of practice using online learning technologies?

Introduction

In Part Two of the Getting Online external research report, a summary of the research results from the surveys and key informant interviews is provided. The external team further answer one of the key research questions:

"How are other similar, external fields of practice using online learning technologies?"

Part Two contains the following information:

► Demographic results of the surveys and key informant interviews

► **Question One:** What online or distance tools or methods do you presently use for your own or for staff training, professional development, or support?

► **Question Two:** What are the objectives or purposes of the online or distance practices you presently use?

► **Question Three:** What results, good or bad, have you obtained with your online or distance learning or support practices, and how did you determine this?

► **Question Four:** Do you find online or distance training or support methods produce different results from face-to-face methods or strategies? If so, what are the differences?

► **Question Five:** How were online or distance training or support methods or tools introduced? Did the introduction go smoothly?

► **Question Six:** What future do you see for the use of online or distance training or instruction, support or professional development methods in your organization?

The questions asked in the survey and during the key informant interviews were not directive, nor were participants prompted towards a certain response. This means that respondents may not have provided information about all of the activity in their organization; they may simply not have thought to include a particular point. Since the respondents were not prompted in any way towards a certain response, their mention of a particular trend or issue would tend to reinforce the importance of their observation. Given this fact, the evaluation trends noted for each question become even stronger. Trends are reported in order of priority.

Demographic overview of respondents

The external team's research was explicitly targeted so that external organizations from each Canadian province and territory were contacted via email and/or telephone to ensure representation from across the country. Surveys were sent to approximately 100 organizations.

In total, 43 surveys were received. Seven of those who responded were then contacted by telephone or in person for a more in-depth key informant interview. Twelve organizations that did not respond to the survey, but which were identified through web-based research (see Part Two of this report for more information about this research), were also contacted and interviewed to try to ensure that all areas of the country were represented in the research. This resulted in a total of 19 key informant interviews being conducted. Because seven of the key informant interviewees responded to both the survey and the interview, their replies were only included once in the overall analysis for a total of 55 possible responses to each question. Respondents to both the survey and interviews were from a mixed group of organizations that provide traditional education and content-specific training, including not-for-profit organizations, government, colleges, and universities.

The external team used e-mail and telephone to contact external organizations and obtain research responses from every Canadian province. Additional website research was also conducted to provide additional examples of online training from every region of the country. The results of this web-based research are examined in Part Three of this report.

Survey respondents and key informant interview participants represent the following demographic groups outlined below. Not all demographic questions were answered by all respondents/participants; therefore, the numbers do not always equal the total of 62 (43 surveys plus 19 interviews). In addition, seven people completed a survey and also participated in a key informant interview; their demographic information is only included once, giving a maximum number of 55 possible responses for any demographic information.

How are other similar external fields of practice using online learning technologies?

By location . . . . (54 responses)

British Columbia. 3
British Columbia/Yukon 1
Alberta 3
Saskatchewan 3
Manitoba 3
Ontario. 13
Quebec 1
New Brunswick. 4
Nova Scotia. 4
Prince Edward Island. 1
Newfoundland 4
National 11
International 3

By area served. . . . . (52 responses)

Local/regional 4 (8%)
Provincial 37 (71%)
National 11 (21%)

By organization size. . . . . (48 responses)

Large (budget over $500,000) 33 (69%)
Medium (budget of between
$100,000 and $500,000). 10 (21%)
Small (budget of less than $100,000) 5 (10%)

By type of organization . . . (53 responses)

Government department. 5   (9%)
Not-for-profit/Charity. 29 (55%)
University or College. 16 (30%)
Other educational institution 2   (4%)
Other 1   (2%)

By number of full-time
equivalent staff . . . . (29 responses)

10 or less. 12 (41%)
11–25 . . . . .8 (28%)
26–100 . . . . .3 (10%)
More than 100 .6 (21%)

SURVEY: Question One

Question One of the Getting Online research with external organizations was:

> *What online or distance tools or methods do you presently use for your own or for staff training, professional development or support?*

All respondents to both the survey and key informant interviews responded to this question.

The responses for this question varied greatly. It is impossible to know if organizations reported all types of technology that are in use or just some. What is apparent is that there was a wide variety of technology being used, including learning management systems such as *Desire2Learn* and *Blackboard/WebCT,* shareware in the form of *Moodle,* communication tools such as *Skype,* and a wide variety of add-on features including podcasts and wikis. While learning management systems were popular in educational settings including high schools, colleges, and universities, many not-for-profit and charitable organizations offered a self-study approach, usually through a website that featured training modules.

Although the question required respondents to detail the tools or methods used for staff training, professional development, or support, 31 respondents (56%) provided information about the technology that they used with the participants in the online training they offer. Some noted that although they offered online training to a particular target group, they did not actually use it for staff training or professional development. Seventeen respondents (31%) answered the question in terms of staff training, professional development, or support, while an additional six respondents provided information about both staff training and training for participants.

Choice of technology

Although the question was not designed to probe why particular tools or methods were chosen, 20 respondents (36%) provided this additional information. Larger institutions such as colleges tended to

use the technology that was already available to them. Organizations that were new to delivering online training chose technology based on their capacity to support participants or for financial reasons. Many of the smaller organizations had limited budgets and limited staff and thus chose a website-based self-study option as a way to offer online training without ongoing staff time or financial costs.

Eight respondents (15%) noted that their online training was developed in partnership with another organization and so they used whatever technology the host organization provided.

One respondent noted that after trying a number of learning management systems, they could not find one that met the language needs of their participants so they designed their own system in-house. This also allowed them to modify it quickly and easily based on user input.

One large provider of online training noted that they offered a variety of platforms and used them depending on clients' needs. Some platforms require high-speed connections, for example, and therefore were not suitable for all users.

Four respondents (7%) noted that interactivity is important so they incorporated some form of two-way communication including discussion forums, Skype, or other technologies. Others noted that it is important to keep participants interested, so they included video and audio components.

"We want to keep people's attention, not provide boring content, engage users right off the bat. Learning needs to be dynamic."
—(Key informant interview from the external research)

Twenty-eight respondents (51%) mentioned a specific platform or platforms, while others responded more generally with answers such as "a website" or a "learning management system" without being more specific. Some talked about the type of training they offered (classes or self-directed) without talking about tools or methods. Some did not identify the type of technology that was being used. Two respondents noted that they were not working with the organization when the online training was developed so they were unable to provide information about the technology being used or why it was chosen.

Of the 28 respondents who did provide specific information about online learning tools and methods, the results showed a wide variety of technology in use. Moodle was a popular option for many survey respondents and a number of people commented on its low cost. Those who used a website to provide their training generally did not provide any specific information beyond the fact that it was a website, but some did mention *Flash* or other multi-media platforms upon which the website was built. Many respondents mentioned using more than one type of technology; therefore, the total of all technologies mentioned totals more than 28.

Online learning as delivered by respondents to the surveys and interviews was delivered in a variety of ways, including asynchronously, synchronously, and/or a blend of the two. Some respondents talked about a blend of learning opportunities that incorporated a combination of online learning and traditional face-to-face learning. The term "blended learning" was used by respondents for both a combination of synchronous and asynchronous online learning as well as for a combination of online and face-to-face learning. Respondents who provide training in French use the term "hybrid learning."

Some respondents reported using one type of software, while others reported using a combination of approaches, for example, self-study modules in conjunction with a discussion forum or *Moodle* courses together with *Skype* meetings. Five respondents reported that they started out using one type of software but had switched to something different.

Specific technology, software, and overall approaches that were mentioned and their frequency are listed opposite in alphabetical order:

From the information, certain trends are identified as follows, presented in priority order.

Learning Management Systems

Fifteen survey and interview respondents (35%) reported delivering online training or education via a learning management system (LMS) such as *Desire2Learn, Blackboard,* or *Moodle.* All respondents who offered education in the form of accredited high school or post-secondary courses used this approach. Given that those providers offered courses over a period of weeks or months and their content usually included assignments and some type of testing, using a learning management system seems logical.

How are other similar external fields of practice using online learning technologies?

Adobe Connect: 1	*Microsoft Live Meeting:* 1
ATutor: 1	*Moodle:* 7
audio conferencing: 3	Online meetings (technology not identified): 2
Blackboard/Web CT: 11	*Ontario Learn:* 4
Blogs: 5	PDF: 3
Breeze Presenter: 2	podcasts: 8
CDs: 2	*Microsoft PowerPoint:* 4
Saba Centra Suite: 1	*QuickClicks:* 1
Connect Pro: 1	*RSS* feeds: 1
Desire2Learn: 3	*Real Player:* 1
Discussion forums: 5	self-study format: 12
Elluminate: 4	*Sharepoint:* 2
e-mail: 3	*Skype:* 2
First Class: 1	video conferencing: 8
Flash: 3	*Web 2.0* technology (not specified): 3
GoTo: 1	web classroom (technology not identified): 1
Hot Potatoes: 1	*WebEx:* 1
Interwise: 1	website: 14
Learning management system (technology not identified): 3	*WebTrain:* 1
Learning Manager: 3	wiki: 4
Listserv: 1	*YouTube:* 2
Lotus Notes: 1	

All respondents who provided accredited education noted that they offered blended training and they also said that they used online delivery to supplement and/or enhance face-to-face education. This does not mean, however, that only educational providers used blended delivery methods, but it may indicate that these organizations felt that blended delivery works well because, as a group, they all made note of it. Given that accredited educational delivery organizations all fell into the "large" category in the demographic analysis, it may also indicate that they had more resources at their disposal that enabled them to offer education using more than one delivery method.

Self-Study Learning

Another key trend is self-study learning. Fourteen survey and interview respondents (33%) reported that their online training was developed based on a self-study method. This generally meant that learning content was provided via a website that participants accessed at their convenience. Some of these sites required registration; some did not. For those who provided this option, cost was often a factor. Although the organization could not afford to offer synchronous or facilitated courses using sophisticated learning management systems, they were able to meet their target audience's needs by providing content in this way. Self-study courses often included quizzes or questions for self-reflection.

One organization noted that they chose the self-study website option because other types of technology were too complex for their target audience (i.e., people with intellectual challenges). When developing their training, they revamped their site to meet accessibility standards.

The same respondents who stated delivery of education as an objective also noted that they offered blended training. They said that they used online delivery to supplement and/or enhance face-to-face education. This does not mean, however, that only educational providers used blended delivery methods, but it does indicate that these organizations found that blended delivery worked well because, as a group, they all made note of it. Given that educational delivery organizations all fell into the "large" category in the demographic analysis, it may also indicate that they have more resources at their disposal that allowed them to offer education using more than one delivery method.

Facilitated learning

Eight respondents (19%) reported delivering facilitated learning that involved some type of communication between an instructor or facilitator and the online learning participant. This question did not deal with facilitation; so again, this information was provided by some but not all respondents. Facilitated learning happened in both synchronous and asynchronous environments. It was done through the use of specific learning management system software such as Blackboard or WebCT, but it also was offered using other means of communication such as video conferencing. Facilitated learning was often associated with larger institutions such as universities and colleges that had the staffing resources to support this type of online learning.

Changing needs

Five respondents (12%) noted that when they first started to offer online training, they used one type of technology but had since switched to something else. However, this question was not specifically asked of respondents, so it is impossible to know if this was the case more frequently than was reported. Most respondents reported on what they used at the time of the interview/survey, not what they may have used in the past.

Four respondents (9%) noted that they would like to explore new technologies but they could not afford to; therefore, they planned to continue to offer what was currently available to them. Technology can become obsolete quickly, but upgrading can be expensive. However, there are a number of emerging technologies that could enhance online learning that organizations were eager to try including podcasting, embedded videos (e.g., *YouTube*) and other Web 2.0 technologies.

Conclusion

This question asked in the surveys and interviews was intended to discover the tools and methods used by organizations external to literacy for their staff training, professional development, and support. Not all respondents answered the question; some reported on the tools and methods they used to deliver online training to their target audience.

Because the question was open-ended and did not provide a check-off list or other structured set of potential responses, respondents provided a variety of information. Although, for example, only four respondents mentioned interactivity, this does not mean that only four organizations were concerned with providing interactive training. It simply means that only four respondents mentioned it.

What can be concluded from the responses to this question, however, is that respondents used a wide variety of tools and methods to deliver staff training, professional development, and support as well as to deliver online training in general. Based on the responses received, it appears that larger institutions, such as colleges, used sophisticated learning management systems that were well-suited to the delivery of a structured, facilitated, educational course. Other smaller organizations, with limited staffing and monetary resources, frequently provided training via a self-study option, allowing the end user access to information about a specific topic.

SURVEY: Question Two

Question Two of the Getting Online research with external organizations was:

> *What are the objectives or purposes of the online or distance practices you presently use?*

In this question, the external team relied on respondents to determine what was meant by "objectives" and "purposes" and to self-report accordingly. Generally, respondents provided information about the content of the education or training they provided and why they chose to offer it in an online format. The majority of respondents provided more than one objective or purpose for the online training and/or distance education they offered.

Based on the responses received for both the surveys and interviews, one of the key goals and objectives for online learning was to provide content-specific training. Organizations chose an online format to help reduce barriers for their students or participants, but also because they wanted to explore and use new technology. Many organizations also wanted to share information via their training, either to their membership or to the general public.

To Provide Content-Specific Training

A wide variety of organizations and agencies that provide some type of online learning completed the external research surveys and interviews. Forty-four out of a possible 55 organizations (80%) indicated that the online learning they offered was designed to provide specific content. Therefore, some of the responses to this question were quite specific in nature and related to the training content offered by that particular agency. It is interesting to see the range of subject matter that is available in an online training format. For example, training is offered:

► To encourage more women to get involved in politics

► To provide training for touring, independent musicians who cannot attend traditional face-to-face training because of their schedules

► To provide Canadian content

How are other similar external fields of practice using online learning technologies?

▶ To provide online resources for youth in crisis

▶ To improve practices, share resources, and build capacity related to governance in government, the voluntary sector, the community, and the private sector

▶ For immigrant newcomers to facilitate labour market integration

▶ To provide pre-employment training in areas where new business is starting up

▶ To provide avalanche first response training

▶ To train volunteer firefighters

▶ To provide language training

▶ To provide high-quality basic skills development on how to work effectively with volunteers

▶ To develop self-knowledge and understanding; to provide opportunities for participants to examine their own attitudes and beliefs

The above list is drawn from a relatively small sampling of organizations that provide education or training by distance. However, even this small sampling clearly demonstrates the range and variety of topics and content that is available in an online format. It would seem that virtually any topic can be delivered in an online format, from traditional education to avalanche training and more.

"We want to offer … a chance to learn while being immersed in a somewhat unconventional learning environment."
—(External research respondent from a college)

To Reduce Barriers

Along with noting the content or topic of the training being offered, most external research respondents also provided some additional reasons as to why they offered online training or education. A number of respondents provided more broad-based information about objectives relating to online opportunities in general, not just to their specific training.

Reducing barriers was a common theme, addressed by 23 respondents (42%). Based on the number of respondents who included this as one of the objectives or purposes of their online learning, it is evident that it is a significant and important reason for choosing this delivery method.

By delivering training online, respondents noted the following barriers are reduced:

▶ *Equitable access.* Nine respondents specifically mentioned that online education and training is beneficial for people living in rural or remote areas. Two respondents noted that online education and training provides equitable access for those with physical disabilities. One respondent noted that the use of voice or software enhancements can provide better accessibility than traditional text-based information.

▶ *Cost.* Nine respondents noted that cost can be a barrier either for the student or training participant, or for the delivery organization. They identified online learning as a way to reduce delivery costs because deliverers can reach more people for the same cost, or, as a participant, the actual cost to participate may be less because of reduced time or travel, or other reasons.

▶ *Travel.* Five respondents also identified travel as a barrier that can be reduced by online learning.

▶ *Convenient and Flexible.* Five respondents noted that online learning is often available when people want it, regardless of the time of day or their location, and is accessible with just the click of a mouse.

▶ *Other Barriers.* Two respondents noted that online learning can provide an alternative for those who do not want to attend face-to-face training. A large organization said that they work to reduce the sense of isolation that students can experience in distance learning.

Of the 23 organizations that addressed the issue of reducing barriers, 17 mentioned more than one barrier. For example, they may have indicated that online training and education reduces the barriers of time, travel, and cost.

"Online training can be used by anyone, regardless of their political beliefs, their location, their income, or their physical ability."
—(External research respondent from a not-for-profit organization)

Innovation and Technology

Seventeen external research respondents (31%) indicated that one of the reasons they chose to offer either education or training online was because of the technology itself. In fact, one respondent even includes this in their mission statement which states that that their focus is "on researching, developing and demonstrating the application of new media and technology to learning at a distance."

Of these 17 respondents, nine indicated that their organization wanted to make use of new technology, either to experiment with it or to become more proficient at it.

"We want to take advantage of technology and provide easier access to information by putting existing resources online."
—(External research respondent from a not-for-profit organization)

Six of the 17 respondents indicated that one of the objectives of their online training or education was to provide an opportunity for their members or students to develop their personal technology skills.

"We want to help our students develop their skills with online tools and methods to help them prepare for their chosen careers."
—(External research respondent from a university)

Other reasons for choosing to take advantage of technology included promoting a positive attitude towards lifelong learning and making learning interactive and fun.

Information Sharing

Fifteen respondents (27%) indicated that one of the objectives for their online education or training was to share and/or disseminate information. Specifically, they said their goals or objectives were:

► to broaden their scope and reach more people through online training

► to act as an online hub where their members can find other training and resources

► to act as a meeting place

► to provide the opportunity for discussion, collaboration, or networking

> ▶ to share information with the general public

> ▶ to receive information

Accredited Education

Nine (16%) respondents noted a specific objective or purpose for their training, usually related to the content or topic being offered. The most common reason was to provide accredited education, either at the secondary or post-secondary level.

"We want to support innovation in education and learning through testing and applied research of new models of delivery using technology and to share information locally, nationally and internationally."
—(External research respondent from a regional not-for-profit organization)

Of the nine external research respondents delivering accredited education in an online setting, two had originally developed this training for students who did not have access to traditional education either because of physical distance or because specific courses were not offered in their school setting. Both respondents noted that their online training had since expanded to include students without those barriers.

"These courses are delivered using a blended student-centered learning model where constant interaction and innovative pedagogy are the main keys to success. ... The delivery of these courses [is] initially aimed at permitting rural area students to have the same opportunities for electives, thus enabling better transition to post-secondary studies. Larger schools have now been attracted to the delivery model and to quality content. It is a win-win situation for all."
—(External research respondent from a government department)

Members Only!

Eight external research respondents (15%) indicated that they provided some type of online training with restricted access for their members only. It is possible that this is the case for more of the organizations surveyed, but they did not mention it. Six of these organizations provided the training themselves; the other two provided an online hub where members could link to training delivered by other providers.

"We want to create a community of practice by providing a password-protected, members' only site where they can share and store information."

—(External research respondent from a provincial not-for-profit organization)

Other objectives

Some specific objectives or purposes (other than content or topic) for online education and training were noted by only one or two respondents. For example, these were:

▶ to create a revenue source to help the organization be self-sustaining

▶ to teach efficiently

▶ to provide faster feedback on assignments and quicker access to learning supports than can be offered by classroom education

▶ to provide training in a format that youth responds to

▶ to help establish a community of practice

Conclusion

This question in the survey and interviews was designed to reveal the objectives and purposes of the online training and education offered by organizations external to literacy. Respondents provided a wealth of information ranging from the specific topic or content being offered to reasons why they chose to use an online format.

Because the question was open-ended and did not provide a check-off list or other structured set of potential responses, respondents provided a variety of information. Although, for example, only three respondents noted that their online training provided a virtual meeting place for their members, it does not mean that other organizations do not also feel that way. It simply means that only three respondents mentioned it.

What can be concluded from the responses to this question, however, is that there is a wide variety of content and topics being offered online across Canada. Furthermore, it is apparent that many organizations believed that online education and training provides a way to reduce barriers to training and offers a viable alternative for people seeking training. Many organizations also assessed the online environment as a useful way to share information, either with their members, with a specific target group, or with the public at large.

SURVEY: Question Three

Question Three of the Getting Online research with external organizations was:

> *What results, good or bad, have you obtained with your online or distance learning or support practices and how did you determine this?*

For this particular question, 51 responses out of a possible total of 55 were received from external (i.e., non literacy) organizations that deliver online learning in various regions of Canada.

Participants were free to provide responses from their professional knowledge of online learning; therefore, their responses were broad and varied. As well, because they were not prompted for responses, the fact that respondents did not mention a particular issue in their response does not preclude the possibility that other evaluation methods may indeed be used in their organization. They may merely have not thought to include it in their response.

Question three pertained to both evaluation results and evaluation methods. Respondents primarily reported on their evaluation tools and methods. Accordingly, in this section of the GO research report, the focus is on describing the methods used by external organizations to evaluate their online learning. However, evaluation results reported by respondents are also included.

GO research results reveal that external organizations were actively involved in evaluation. Organizations used a variety of approaches to evaluation including formal (59% of respondents) and informal (21% of respondents). Ten percent of respondents did not evaluate their online training, but half of these did not conduct an evaluation because online learning was so new to their organization. Another 10% made other evaluative comments.

Overwhelmingly, external respondents indicated that their online learning had received positive evaluation results. Seventy-four percent reported positive evaluation results. Mixed results were reported by 18% of respondents, and negative results were reported by 8% of respondents.

Formal Evaluation

Thirty of 51 external research respondents (59%) reported they used formal evaluation methods to evaluate online learning. An evaluation was considered formal if concrete data about online learning was gathered using some kind of intentional, deliberate, and structured process.

The following were the priority formal evaluation methods used by external research respondents. Each is described in more detail in the following section.

▶ Gathering evaluative feedback from participants

▶ Assessing the success, retention, and failure rates of participants

▶ Engaging an external evaluator

▶ Conducting a research study

▶ Measuring outcomes

▶ Incorporating user-testing

▶ Participating in a provincial assessment

Some respondents selected more than one method of evaluation.

Gathering Evaluative Feedback from Participants

Directly gathering feedback from participants was by far the most common method of conducting a formal evaluation. In fact, 77% of organizations (23 of 30 respondents) who reported that they conducted a formal evaluation used some kind of formal feedback mechanism to gather input directly from the participants accessing their online learning.

Respondents reported they collected data using the following tools and methods: conducting surveys at the end of the online course via online or print-based formats or via a telephone survey, engaging in quarterly participant satisfaction surveys, and surveying participants after a period of time had passed.

Typically, respondents asked their participants to comment on items such as overall satisfaction, course content and materials, the instructor, the online learning platform, and satisfaction with the type of online learning method (i.e., asynchronous, synchronous, or blended).

While not an overwhelming trend, three respondents mentioned that it was difficult to get participants to fill out the evaluation. These

respondents felt that they did not have enough baseline data from which to draw any significant conclusions. One respondent noted that in their experience, often the participants who experienced difficulty responded to their survey; those who experienced success were less likely to respond.

"The college conducts an online student satisfaction survey for every course. In fall 2006, 90% of respondents strongly agreed or agreed with the statement 'I would recommend this course to a friend.' "
—(External research respondent from a college)

Assessing Participant Success, Retention, and Failure Rates

Four respondents indicated that they used the success, retention, and failure rates of participants to evaluate online learning in their organization. These organizations used these indicators in a deliberate, intentional manner and they tracked these rates over various time periods. Several noted that with online learning, participant success and retention had increased in their organization.

"Retention rates in our online courses have gone from about 75% to 94% in 2007–2008."
—(External research respondent from a school board)

Engaging an External Evaluator

Engaging an external evaluator was an evaluation method used by three respondents. These types of evaluations were in-depth and covered a broad spectrum of indicators regarding the successes and challenges of online learning in these organizations.

"We are engaged in a full evaluation process with an outside consulting firm, using both outcome measurement and developmental evaluation, to determine our success/failures and apply the learning as we go."
—(External research respondent from a not-for-profit organization)

Conducting a Research Study

Three external research respondents noted that they had conducted a research study to evaluate online learning in their organizations. Typically, these research studies were broad-based, and covered in a more

in-depth manner a minimum of several years of online learning in their organization. Interestingly, these respondents came from three different types of organizations: a university, a college, and a not-for-profit organization.

"I have just completed a follow-up study of all graduates of both programs in the past 10 years. The results of that research (to be published shortly) show that the program is regarded as successful in the eyes of its students."
—(External research respondent from a university)

Measuring Outcomes

Three external respondents indicated that they evaluated by measuring the outcomes of their online learning. For example, one organization with the training goal of helping participants find employment tracked whether in fact participants reported finding a job after taking their online training. Another tracked whether participants implemented what they had learned during their online course. Several respondents also noted that more outcomes-based evaluation should be done in the field of training and education and that often, too simplistic evaluations were conducted that had little value.

"The focus of the evaluation is to track the outcomes of the training."
—(External research respondent from a not-for-profit organization)

Incorporating User-testing

Two external organizations incorporated user-testing as their evaluation tool. These organizations formally tested and tracked user response to their online learning and made appropriate adjustments.

"We are still in the testing phase of our project but our website has received great feedback from various educational groups."
—(External research respondent from a not-for-profit organization)

Participating in a Provincial Assessment

One organization based its evaluation on province-wide formal assessments of the results of online and face-to-face learning initiatives.

"Based on provincial assessments, our results are the same as face-to-face offerings."

—(External research respondent from a government department)

Qualitative Statements

One external organization conducted its evaluation by gathering and tracking qualitative statements from stakeholders.

"We have determined the success of our programs through qualitative statements from students and community employers, student retention, enrolment rates."

—(External research respondent from a college)

Informal Evaluation

Informal evaluation methods were used by 21% of external research respondents (11 of 51 respondents to evaluate online learning. An evaluation was considered informal if information about the online learning initiative was collected in an unstructured and non-deliberate manner.

Commonly used informal evaluation methods used by external research respondents, in ranked order of frequency, were:

▶ Informal feedback from participants

▶ The popularity of the online learning initiative

▶ The experience of success in the "real world"

▶ Input from an advisory group or volunteer content readers

▶ Informal feedback during the start-up phase

Several respondents indicated that they were using more than one of the above methods to evaluate.

Informal Feedback from Participants

Seven of the 11 external organizations engaging in informal evaluation gained feedback about online learning through informal input from participants. This included receiving email messages, anecdotal comments, and testimonials from participants. Typically, these

organizations mentioned receiving positive informal feedback from participants and they indicated having an overall sense that online learning was successful.

"We have received great informal feedback and high usage and buy-in but no formal data has been collected."

—(External research respondent from a not-for-profit organization)

Popularity of the Online Learning Initiative

Five external organizations noted that they informally evaluated their online learning by assessing its popularity. Such organizations noted that there had been a strong demand for their online learning initiatives and that enrolment was increasing.

"As well, success can be measured by the fact that enrolment in our online courses is starting to dramatically increase."

—(External research respondent from a university)

The Experience of Success in the "Real World"

Five of the 11 external organizations engaging in informal evaluation mentioned that they knew their online learning had succeeded because it had been successful in a "real world" environment. The indicators they described are listed below.

▶ One organization had received awards for its online learning initiative.

▶ Another noted that a major national newspaper had written an extremely favourable article about its online learning initiative.

▶ Two noted that they were self-sustaining not-for-profit organizations who had to offer their online training on a fee-for-service. Accordingly, if their online courses were not excellent, they would not be able to offer them. One further noted *"we have had to be more business-like and offer members a clear return on their investment for the time they invest in training."*

▶ Another had sold the rights and the content of its online training to the federal government and remarked that having the federal government take such an action was a powerful endorsement of their success.

These respondents noted that receiving positive validation through external sources was a clear indication of the success of online learning in their organizations.

"As a fee for service organization, courses must be successful or our clients will not continue to send their employees for training."
—(External research respondent from a not-for-profit organization)

Input from an Advisory Group or Volunteer Content Readers

Three respondents stated that they used either a volunteer advisory group or volunteer content readers to evaluate the content of their training. Volunteers were recruited from typical user groups and their feedback, according to respondents, greatly informed and improved the content of their online learning.

"Feedback is mostly on a volunteer basis (we tried to target different potential user groups)."
—(External research respondent from a not-for-profit organization)

Feedback during the Start-up Phase

Two respondents mentioned that they were still currently in the testing or initial start-up phase of their online learning initiative and that they were using informal feedback as an interim measure. Both noted how positive this interim feedback had been.

"Ours is a brand-new project. While we have some anecdotal reports on our 'under development' website, we have no hard data on results. Feedback to date has been very positive and we are continuing to expand our online training segments."
—(External research respondent from a not-for-profit organization)

No Evaluation

Ten percent of external research respondents (five out of 51) noted that they did not conduct an evaluation of their online course. Three of five respondents (60%) indicated they had not conducted an evaluation because their online training was so new. The remaining two did not indicate why they had not evaluated their training.

How are other similar external fields of practice using online learning technologies?

"Our podcasts are so new; we do not have any evaluation information at this time."

—(External research respondent from a not-for-profit organization)

Other Evaluative Comments

Five of the 51 external research respondents (10%) mentioned other issues relating to evaluation, including that they had chosen not to focus on evaluating online learning because they believed that online learning has already been fully validated by other research studies. Instead, they had chosen to focus their evaluation on assessing the most applicable online learning technologies and emerging trends.

Others stated the difficulty of evaluating online learning because they had offered face-to-face training for many years and they felt that it was almost impossible to conduct any comparative evaluation as comparing online and face-to-face learning was similar to comparing apples to oranges.

It was also noted that sometimes the quality of the evaluation of the online training was low and that only basic criteria were used. For example, participants might be asked mainly about their level of satisfaction or whether they completed the training. It was noted that the more meaningful and useful evaluation questions such as "Did you learn anything?" or "Did you apply what you learned?" or "Did the application of what you learned make a difference?" seemed to be seldom asked.

"We haven't done any exclusive comparative studies. We don't feel we need to do it because it is generally accepted now that online education works (others have done the studies). Instead, we feel it is more important to focus our evaluative efforts on examining the most appropriate uses of online technologies and possibilities."

—(External research respondent from a college)

Evaluation Results

While external respondents responded primarily to research question 3 by reporting on their evaluation tools and methods, valuable evaluation results were also shared.

Of the 51 external organizations who responded to this question, 38 respondents discussed their evaluation results. The remaining 13 talked

only of the evaluation process they had used or indicated that they had not conducted an evaluation of their online training.

Overwhelmingly, external respondents reported positive evaluation results. Almost three-quarters of respondents noted that their online learning had received positive evaluations. Mixed results were reported by close to 20% of respondents and negative results were reported by fewer than 10% of respondents.

Positive Evaluation Results

A significant majority of external research respondents (28 of 38, 74%) reported receiving positive evaluation results for their online learning.

Positive evaluation comments included:

► Online learning offered highly accessible learning opportunities for participants (anytime, anywhere access to training).

► Online learning broke the barriers of geographic distance by greatly increasing access to participants from rural, northern, or remote areas of their province, or other parts of Canada, or even the world.

► This modality made learning more affordable for participants (it reduced travel costs and even allowed free access to some online learning opportunities).

► Online learning better addressed the needs of time-strapped participants by offering more flexible learning opportunities that promoted a better work/life balance.

► This method of learning reached new client groups (e.g., new Canadians, Aboriginal people, people with disabilities, Francophones, etc.) that were difficult to reach with traditional learning opportunities.

► Important indicators such as participant retention, participant progress rates, and participant satisfaction experienced an increase with the move to online learning

► Course enrolment increased since online learning was introduced in their organization.

► Participants experienced successful outcomes and effectively met their goals

► Online learning allowed organizations to offer a learning environment that is more suited to the needs of some participants.

"We have had excellent results with online learning this has made college programs accessible to students who cannot attend the campus in person every day. Most of our students have full time life responsibilities in addition to being students."

—(External research respondent from a college)

Mixed Evaluation Results

Seven of 38 (18%) external research respondents indicated that their online learning had received mixed evaluation results.

Mixed evaluation results included:

► Some participants readily adapted to the online learning environment, while others struggled and never adapted well to this new modality.

► Some participants indicated that they missed the face-to-face interaction and networking with other participants and facilitators. Others noted that they preferred online learning because of its increased accessibility and flexibility and they did not miss the more interactive face-to-face environment.

► Some participants embraced online learning technology, while others struggled with the technology and found it to be a barrier to their learning experience.

► Some participants readily adapted to the more self-directed learning environment offered by online learning while others found that this self-directed approach made learning more difficult for them.

"We have conducted several research studies with our continuing education students. We found that a fully online approach is best suited to continuing education or post BA level students. We find our college level students are not sufficiently self-directed to be successful with fully online delivery."

—(External research respondent from a college)

Negative Evaluation Results

A small number of external research respondents (3 of 38, 8%) indicated that their online learning had received negative evaluation results.

Respondents reported the following negative evaluation results:

▶ In their online learning initiative, a few organizations found that it was difficult to replicate the networking, information sharing, personal contact, and warmth of face-to-face training.

▶ During their online learning sessions, a few organizations found that it was difficult for facilitators to assess whether training was effective during an online learning session because they could not assess body language and facial expressions to see whether participants were engaged or not.

▶ A few organizations found that there was a steep learning curve in getting some people used to the technology and comfortable with online learning.

▶ A few respondents noted that some people required extensive support to be effective online learners, and that this was sometimes beyond what the organization was able to provide.

"Although online training has its merits, it will never replace face-to-face sessions."
—(External research respondent from a not-for-profit organization)

Conclusion

The Getting Online external research team found that external organizations take the issue of evaluating online learning seriously. While the majority of respondents used formal methods to evaluate online learning, they used informal evaluation as well. The common use of a variety of evaluation methods and techniques speaks to the commitment shown by these organizations to the continued improvement of online learning in Canada.

They also discovered that most external organizations had received positive evaluation results for their online learning initiatives. Respondents also documented mixed and negative results, but these were much less prominent. The overall strong positive evaluation results experienced by external organizations again point to a positive future for online learning.

SURVEY: Question Four

Question Four of the Getting Online research with external organizations was:

> *Do you find online or distance training or support methods produce different results from face-to-face methods or strategies? If so, what are the differences?*

For this particular question, the external team received 53 responses out of a possible total of 62 responses from external (i.e., non literacy) organizations that, at the time of the survey, delivered online learning in a variety of provinces and territories across Canada. Seven people participated in both the survey and the key informant interviews. However, since they spoke about different issues relating to comparisons between online and face-to-face learning, or provided new details and perspectives in the two different research methods, their responses are tracked individually.

GO research results reveal that external organizations experienced overwhelmingly positive results from online learning.

These positive results were (in priority order):

▶ the removal of geographic barriers

▶ more convenient and flexible learning opportunities

▶ reduced costs

▶ more in-depth and reflective learning opportunities

▶ personal preferences

▶ a higher quality of participant/instructor time and access

▶ easier ability to update content

▶ better access to subject matter experts and specialized knowledge.

Negative results from online learning, while much less prevalent, were also reported. These negative results were (in priority order):

► less interactivity

► less ability for networking and informal information sharing

► personal preferences

► a less in-depth learning environment

► a more challenging environment for instruction and content development

In addition, some respondents noted that due to the inherent differences between the two modalities, it was not possible for them to effectively and reliably compare the results of online and face-to-face learning. Still others noted that they had experienced the same results with both online and face-to-face learning.

Positive Results Produced by Online Learning

Removal of Geographic Barriers

An extremely strong positive result noted by 38% of the 53 external research responses received was that online learning increased access to learning opportunities by removing geographic barriers. In particular, respondents noted that online learning vastly increases access to training for Canadians living in remote, rural, and northern areas. For many residents of such locations, online learning was the only way for them to access training without traveling often great distances to the nearest urban centre. The immense geographic size of Canada is a significant barrier to training for many. Online learning is a key way to circumvent this barrier.

Many noted that all Canadians needed and deserved convenient access to quality training opportunities and that only online offered such access. Others noted that having the ability to share training and resources in a cost-effective way across this vast and diverse country was an incredible benefit for both organizations and individual Canadians.

> *"We have had excellent results with online learning, this has made college programs accessible to students who cannot attend the campus in person every day."*
> —(External research respondent from a college)

Convenient and Flexible Learning

Another highly positive result noted by 36% of external research respondents was that online learning provided more convenient and

flexible learning opportunities. These respondents noted that many Canadians experienced an extreme time crunch in their family and work lives, and that many people found it hard to find the time to attend face-to-face training.

Online learning, when offered asynchronously, allowed people to access training at times and locations convenient to them. Synchronous online learning (learning offered in real time) allowed people to access training right at their desktop so that participants did not have to spend precious time and money traveling to face-to-face events.

Respondents noted that online training was often self-paced, which allowed busy people to take training at a pace that suited their needs and schedules. Others reported that online learning was an easier way for participants to take just the amount of training they immediately needed, as opposed to having to take a full face-to-face course on a given topic. One respondent called this "just in time" or "just for you" training. Also, online learning often provided the capacity to offer training when people needed it, rather than being limited to the set training dates and times of most face-to-face training programs.

The ability to access training at times and locations convenient to participants is critical. For example, one college mentioned that in the past, quite a few students could not complete their diploma because of the inflexible scheduling provided by face-to-face learning. This college further noted that now they graduate several hundred students per year in online programming who would have never succeeded before in a traditional learning environment.

Another organization, in a bid to add additional flexibility and convenience, intended to supplement their current online course offerings by developing 15-minute podcasts for participants to listen to on their iPods® at convenient times during their busy day.

A few respondents also noted that in their experience, sometimes employers were reluctant to release staff for the longer blocks of time required by face-to-face learning, but that they were more willing to release staff for shorter online courses.

"The flexibility provided by distance learning gives clients the opportunity that they otherwise might not have with life commitments."

—(External research respondent from a university)

Reduced Costs

Another strong positive result identified by 21% of external research respondents was that online learning is more cost-effective than face-to-face.

Respondents indicated that it was more cost effective for the *organization* itself to deliver online learning because:

► Online learning reduced their organizational travel costs.

► Online learning eliminated the costs of renting workshop facilities.

► Online learning allowed organizations to offer training in other geographic regions where, because of high costs, it would have been impossible for them have delivered to face-to-face training.

► Online learning offloaded the cost of printing handouts and other training materials from the organization to the participants since materials were often sent out via email.

Respondents also indicated that online learning was more cost effective for *participants* because the costs of items such as participant travel, accommodation, and meals were eliminated. As well, the cost of their personal time away from the office was also reduced.

"It is very hard and expensive to offer face-to-face training in two-hours blocks (on a fee-for-service basis) that pays for itself. However, these shorter blocks (that are being requested by the clients) are more easily offered online."

—(External research respondent from a not-for-profit organization)

More Depth

Fifteen percent of research respondents mentioned that a positive result of online learning was that it offered more in-depth and reflective learning opportunities compared to face-to-face learning. Interestingly, a different group of respondents (9%) identified the opposite finding: online learning *lacks* the depth offered in a face-to-face learning environment.

Respondents found that online learning provided a more in-depth and reflective learning environment because:

► The time delays inherent in asynchronous online learning resulted in more reflective and thoughtful responses. Participants did not need to respond immediately as is the case with face-to-face learning.

Rather, they could fully consider the issues at hand and post a more thoughtful response at a later time. In a face-to-face learning environment, there is limited time for participant input. Therefore, it is typically the extroverts who get the opportunity to participate and it is their voices that usually dominate the classroom. However, with online learning both extroverts and introverts have an equal opportunity to participate. All are "heard" in equal measure.

▶ Those who engaged in online learning tended to be highly motivated and committed; this typically resulted in a rich learning experience for participants and instructors.

▶ There is more time for follow-up and interaction between participants and instructors.

"The main difference seems to be the rich online learning environment where, unlike the traditional classroom, everyone can 'talk at once.' By this I mean that it transcends time constraints under which the traditional classroom operates because only one person can speak (usually the more extroverted) and there is a limit to the number who can speak during a class period. In the online setting, it is possible for everyone to speak in response to discussion questions, and then we've been requiring learners, in small groups, to respond to each other's written responses, so it becomes a very lively learning environment."

—(External research respondent from a not-for-profit organization)

Personal Preference

The personal preference of participants was noted as a factor in terms of positive results (personal preference is also identified under the "negative results" section of this report). Thirteen percent of external research respondents noted that some participants are better suited to—or simply prefer—an online learning environment. This may reflect a learning preference/style phenomenon.

Reasons respondents gave for their preference an online learning environment over a face-to-face environment include:

▶ Some people inherently preferred (or required) the flexibility of online learning.

▶ Highly self-directed people often preferred online learning.

▶ Some people preferred to learn on their own; therefore, they thrived in the less interactive online learning environment.

▶ Sometimes online environments were in fact highly interactive and provided people with the kind of interaction that they wanted (not real time interaction but interaction that fit their personal schedules).

▶ Some people had such busy lives or lived in remote or rural areas and they preferred online learning because that was the only way for them to access needed training.

▶ Online learning offered individuals more privacy for receiving training on sensitive issues such as domestic violence or supporting a disabled child.

"Some people simply do not want interaction to be part of their learning experience. They want merely to 'get on with it' and to receive the learning materials and teaching and incorporate it themselves with no interaction."
—(External research respondent from a university)

Subject Matter Experts / Specialized Areas of Knowledge

Thirteen percent of external research respondents believed that a positive result from online learning was its easier access to subject matter experts and specialized areas of knowledge. These respondents reported they typically offered online learning in specialized areas, for example, domestic violence, medical, special needs, music, etc. They noted that online learning could much more effectively link people with experts and specialists across wide distances, inter-provincially, nationally, and internationally. They saw this as a very strong benefit offered by online learning.

One organization, for example, offered online training for families and caregivers on how to support a person with Alzheimer's disease. They noted that this online training was now widely available throughout their province and stated: *"How would such training on a much-needed topic ever be available any other way?"*

"Also, many of our students' work areas are highly specialized and thanks to e-learning they can link with fellow colleagues with the same interests and needs as well as with various subject experts. It is also critical for obvious reasons for medical professionals to keep their skills up on an ongoing basis. Online makes this process just so much easier for many of them."
—(External research respondent from a university)

Participant/Instructor Time and Access

A positive result mentioned by 9% of external research respondents was that online learning provided a higher quality of participant/ instructor time and access. These respondents noted that with online learning, participants had quick and easy access to instructors. Instead of instructors having set office hours as with face-to-face learning or departing after delivering a face-to-face workshop, with online learning, the instructor was merely a click of the mouse away. For respondents, online learning provided a tool that permits easy communication outside of "regular classroom or office hours." Several respondents noted that submitting assignments or questions and comments to the instructors was much easier and more convenient with online learning. As well, they noted that instructors returned responses much more quickly.

"Online has a much higher quality of time for both the instructor and student."

—(External research respondent from a college)

Updating and Keeping Content Current

A final positive result reported by 9% of external research respondents was that online learning materials were easier to update and keep current. These respondents noted that unlike face-to-face training, whole online courses or online materials could be readily updated. They also noted that with online learning, newly emerging resources, information, and links to websites could be quickly added, which is not the case with traditional learning methods. As well, older or out-of-date information and resources could be easily deleted. Given the pace of change being experienced in modern Canadian society, this ability to rapidly add or delete resources and information was seen as a positive result from online learning.

"It is easy to update information and resources online compared to a face-to-face course."

—(External research respondent from a not-for-profit organization)

Negative Results from Online Learning

Less Interactivity

The most commonly identified negative result (mentioned by 19% of respondents) was that online learning offered a less interactive learning environment. In the view of these respondents, face-to-face learning

provided a much more dynamic and warm environment where barriers between people could be more easily broken down, resulting in more fruitful interaction. Some respondents noted that live contact with other people was important for interactivity and that learning was, therefore, best accommodated by bringing people together in one place. Several noted that the synergy offered during face-to-face sessions was usually lost in online environments.

Some respondents also believed that instructors could offer more support in a face-to-face environment because they could directly interact with participants and read body language and facial expressions. In addition, some felt that face-to-face learning was more conducive to providing better peer-to-peer support because once participants met each other in person, they would be more likely to form supportive bonds and networks.

Though mentioned less often, a few respondents also thought that online learning typically involved reading materials online and as such, it was inherently not interactive. As well, several respondents noted that small group work was particularly difficult online.

"Many of the presentations I do are interactive and involve the sharing of ideas. I find the use of online does not support that technique."
—(External research respondent from a government department)

Lack of Depth

While 15% of respondents identified that online learning offered a more in-depth learning environment, other respondents (9%) identified the opposite finding: that online learning *lacked* the depth offered in a face-to-face learning environment. These respondents found that online learning lacked the depth provided by a more traditional learning environment because:

► Face-to-face learning was less structured and it more readily allowed participants to explore tangents and new areas of interest more fully.

► Face-to-face learning offered a true break and "time away" from the demands of the office and participants could therefore focus more fully on learning.

► Face-to-face learning often was delivered over a longer time period and as such, issues could be discussed in a more in-depth manner.

► Face-to-face learning offered a warmer learning environment and participants felt more comfortable to discuss the issues at hand.

"Face to face training also allows for an expansion of the material as directed by user interests. Online training is for the most part more narrowly focused."

— (External research respondent from a not-for-profit organization)

Personal Preference

As was the case with respondents who reported positive results from online learning, the personal preference of participants was also noted as a factor in terms of negative results. Eleven percent of respondents noted that some participants were better suited to — or simply prefer — a face-to-face learning environment.

For respondents, reasons for preferring a face-to-face learning environment over an online environment included the following:

► Some participants had a general preference for the more interactive and warm environment provided by face-to-face learning.

► Some disciplines, for example, medical, mechanical, or technical, were better suited to a face-to-face environment.

► Different participants had different learning strengths and some inherently preferred face-to-face learning because it better met their personal learning styles.

► Some people were less self-directed and disciplined in their study skills and did not readily adapt to online learning that was self-driven.

"Navigating within the online learning environment and taking the time to go online are two big challenges. As long as there are opportunities for face-to-face it seems to be the overall preferred method."

—(External research respondent from a government department)

Networking and Informal Information Sharing

A negative result of online learning identified by 9% of respondents was less opportunity for networking and informal information sharing. These respondents felt that face-to-face learning environments were less structured and therefore more conducive to building relationships between participants. Several respondents noted that many people who

take training from their organization worked in isolation, and they greatly benefited from the networking opportunities offered by face-to-face learning.

> *"Networking and informal sharing is important and is met with face-to-face. We've tried to replicate this component with our online sessions, with poor results."*
>
> —(External research respondent from a not-for-profit organization)

Instruction

Nine percent of respondents mentioned that online learning was more difficult to instruct than face-to-face learning. These respondents noted the following instructional difficulties with online learning:

► It was more difficult for instructors to engage participants.

► It was more difficult for instructors to encourage interactivity amongst participants.

► It was more difficult to assess whether participants were understanding and interacting with the course materials.

► It was more difficult to find and train instructors.

> *"With a traditional classroom session, the trainer would have a good sense of whether the participants got it."*
>
> —(External research respondent from a not-for-profit organization)

Content Development

A few respondents (6%) noted that creating content for online learning was more demanding than content creation for face-to-face learning. These respondents noted that content creation for online learning was not only more difficult, but that it was sometimes not recognized by the host organization that content creation required considerable time, skill, and support.

> *"The college seems to assume excellent online content just magically appears out of old face-to-face course content. It sometimes seems to be expected that all of this should just 'happen' and happen well without any support!"*
>
> —(External research respondent from a college)

Other Findings

Not Possible to Compare

Nine percent of respondents found that due to the inherent differences between face-to-face and online learning, it was not possible for them to effectively and reliably compare the two. These respondents found it impossible to compare face-to-face and online learning because the two modes of delivery had different goals and met different participant needs and as such, any comparisons were not valid. Several also noted that their assessment practices were not consistent between the two modes of delivery which made comparisons invalid.

"We can't compare results since it isn't an apples to apples comparison."

—(External research respondent from a not-for-profit organization)

Identical Results

Eleven percent of external research respondents stated that they had experienced the same results with both online and face-to-face learning. These respondents found that while the delivery methods were different, there were no significant differences in the results experienced by participants.

"We have found that students are roughly as successful in these courses as in our face-to-face course. Researching the literature, some people find differences and others find the same results. In our limited uses, the results have been substantially the same."

—(External research respondent from a college)

Conclusion

In conclusion, the Getting Online external researchers found that external organizations identified primarily positive results from online learning compared to face-to-face learning. Key amongst these positive results were the enhanced access provided by online learning due to the removal of geographic barriers, its more convenient and flexible learning opportunities, and reduced costs. Respondents reported other positive results from online learning, including more in-depth learning opportunities, the opportunity to learn based on personal preferences, a higher quality of participant/instructor time and access, easier ability for organizations to update content, and better access to subject matter experts.

Respondents identified much fewer negative results from online learning. The most prevalent negative result identified was that online learning provided a less interactive and warm environment. Other negative results included the following: less ability to network and informally share information, less ability to learn based on personal preferences, a less in-depth learning environment, and a more challenging environment for instruction and content development.

As well, some external research respondents stated that they could not effectively compare the results of online and face-to-face learning because the results and modalities were inherently too different to warrant such a comparison. In addition, some respondents indicated that online and face-to-face learning had produced similar results.

The strong positive results from online learning noted by the external research respondents support the concept that online learning will continue to grow and flourish in Canada. However, the negative results noted by this Getting Online research serve as a reminder that while online learning can offer an effective option for learning, it is not suited to all learning environments or to all people. The seemingly contradictory findings for some aspects of the research and the apparent lack of consensus amongst respondents indicates that the opinions and feedback from respondents are very individualized and relate to learning styles preferences.

SURVEY: Question Five

Question Five of the Getting Online research with external organizations was:

" *How were online or distance training or support methods or tools introduced? Did the introduction go smoothly?* "

The external team received 58 responses out of a possible total of 62 responses for this particular question. Seven people participated in both the survey and the key informant interviews. However, since they spoke about different issues relating to the introduction of online learning or provided new details and angles in the two different research methods, their responses were analyzed individually and are organized below from the highest to the lowest frequency of occurrence.

Due to the breadth of respondent experiences and the types of organizations researched, the external team gained a wide variety of valuable insights. The most commonly cited methods for the introduction of online learning were providing initial and ongoing support to participants, actively marketing the online training, and offering instructor training. For respondents, other highly ranked factors were providing user-friendly technology, creating effective content, engaging in continuous improvement, piloting, and having access to adequate funding. Still popular but slightly less highly ranked were factors such as having high level support, working with motivated participants, focusing on target audience needs, training participants with pre-existing aptitudes, and providing technical support. The lowest ranked factors were engaging in pre-planning and research, working with early adopters, and implementing online learning gradually.

Providing support to Participants

Respondents mentioned the provision of support to participants most frequently; a notable 45% of respondents identified participant support as a factor in the successful introduction of online learning in their organization.

Initial participant support activities for online learning identified by external organizations included:

► Providing a user-friendly registration process

► Sending out clearly-worded instructions to help participants join up to the online learning event

► Sending out required support material well ahead of time to familiarize participants with all of the online course requirements

► Sending out clear technical instructions or providing access to a help desk

► Sending out FAQs or help files to participants

Some external organizations also mentioned providing participants with a variety of orientation opportunities. Some had a simple orientation process (i.e., well-written instructions that were emailed out ahead of time). Others offered a more in-depth orientation process where an instructor would work one-on-one with participants ahead of time to ensure that they had a basic familiarity with the online learning platform and course materials. As well, some organizations enhanced their orientation process by building in time for participants to explore the online learning platform and allowing time for introductions and group bonding activities (e.g., photo sharing, etc.).

Respondents indicated that orientation information was shared on a variety of topics, including:

► Program structure

► Program expectations, requirements, and deadlines

► Technical features of the online learning platform

► Online study skills

► Time management issues in an online learning environment

► Online etiquette

For respondents, providing ongoing participant support was also important to the introduction of online learning. Respondents noted that many participants needed human interaction and support. Support included helping participants to successfully log in to the learning event and then monitoring progress and intervening as necessary to ensure an effective learning experience.

How are other similar external fields of practice using online learning technologies?

Some external organizations provided such ongoing support through the instructor, while several organizations assigned an advisor to each participant. Respondents indicated that participants new to online learning, those with special learning needs, and those who lack confidence seemed to need such support the most.

"We work hard to ensure that our students do not feel isolated, but that they experience a strong social and teaching experience while enrolled."

—(External research respondent from a university)

Marketing

Another commonly cited factor was marketing. Forty percent of respondents identified the importance of active and ongoing marketing to the successful introduction of online learning.

Marketing was mentioned as being a time-consuming (and sometimes difficult) task that needed dedicated financial and human resources in order to succeed. Some noted that effective promotion and lack of public awareness of learning opportunities were constant challenges.

External organizations used a wide variety of marketing strategies.

Some used their internal channels of communications for marketing:

► internal newsletters

► email communiqués

► an annual calendar of events

► mail-outs to their members

► their website

Other organizations mentioned external marketing efforts:

► *Google* ads

► press releases

► external networking

► word of mouth

► listservs

► presentations

► information sharing at conferences and trade shows

"Promotion and awareness, especially when working at the national level, is a constant struggle. Human resource capacity is needed for marketing and promotion."

—(External research respondent from a not-for-profit organization)

Training for Online Instructors

Providing training to instructors on effective online facilitation, content development, and the use of the learning platforms and technologies was cited as an important factor in the introduction of online learning by 33% of respondents.

In some cases, organizations provided this training immediately. In fact, some did not allow instructors to facilitate an online course until they had taken a required amount of training from the host organization. Some even required a formal "tech check" where instructors needed to first prove their technical or facilitation skills ahead of time. Other organizations began to offer online training and realized after the fact that the lack of instructor training was a problem area.

Some organizations provided one-time instruction while others provided ongoing training for instructors in new technologies or enhanced training in facilitation or content development. In some cases, organizations provided this training for instructors fully online; in other cases, instructor training was offered face-to-face, via printed manuals, or by sharing current research practices on effective online learning techniques. Some also offered follow-up training at annual professional development events or conferences.

A few respondents mentioned that training for online instructors was not adequately provided by their organization; they further noted that this has impeded the development and success of online learning. Several organizations stated that it was hard for some instructors who were used to traditional methods to adapt to online instruction. In some cases, instructors tried to continue with the same lecture-type format and content development style they are used to with few adjustments for the new online environment. Some organizations had a code of conduct or guidelines and standards to support instructors' provision of higher quality facilitation and content development. Still others had a formal evaluation process where participants could submit feedback on course content and facilitation.

How are other similar external fields of practice using online learning technologies?

> *"We provide training to instructors delivering over the network and share best practices to ensure the best possible teaching and learning environment for all concerned."*
>
> —(Participant in the external research from an educational institution)

User-Friendly Technology

Seventeen percent of respondents mentioned the importance of reducing technological barriers for participants and using user-friendly delivery platforms in the introduction of online learning.

Many noted that it was extremely frustrating for participants, especially those new to online learning, to encounter technical difficulties. Some also noted difficulties with Internet connection speeds and lack of high speed Internet access in some parts of the country. Others mentioned that the use of technology needed to reflect good adult education principles in order to be effective for learning and that technology should not drive the learning; technology is merely the tool for learning. As well, several respondents mentioned that technology was continually evolving and that it was important for organizations to keep abreast of technological changes and improvements that could benefit learners' participation and engagement in online learning.

> *"There was a mixed reaction with some anticipated users not engaging at all, some trying to engage but having technical difficulties and some adopting quickly and easily."*
>
> —(External research respondent from a not-for-profit organization)

Effective Curriculum/Content Development

Developing curriculum and content suitable for an online learning environment was cited as important to the introduction of online learning by 17% external organizations.

These organizations noted that an online course will not succeed if the content was not current, well-written, and relevant to participants. Some organizations ensured that content developers had access to training, research, and promising practices on effective online content development. Others used advisors or volunteers to review the content for quality and relevance. Still others used pilot sessions to pre-test their curriculum. Some mentioned the challenge of getting instructors and faculty not to just dump content online from traditional courses but

instead to get them to develop content that has been specifically adapted for an online environment.

"We work hard to ensure that instructors don't just do 'content dump' but instead properly structure regular content into engaging online formats."

—(External research respondent from a college)

Continuous Improvement

Seventeen percent of respondents from external organizations mentioned the importance of continually improving online learning as a crucial element in the successful introduction of online learning.

These organizations typically had been offering online learning for a long period of time. They believed it important to continually work to explore ways to improve online learning through curriculum, technology, and delivery.

Some organizations mentioned how important it was not to get stuck in old technologies or ways of doing things; instead, they believed it was key to keep an open view and to continually explore new options. As a result of such explorations, several organizations continued to use the same online learning platform as previously, but had added a new technological component (e.g., *Moodle,* wikis, or blogs). Others had switched online learning platforms completely. Still others had modified their online learning program by offering blended learning options such as adding face-to-face time through group workshops, guest speakers, or field trips. As well, some organizations mentioned that they continually updated the curriculum of their courses to keep it fresh and relevant. Still others were examining delivery methods and continually improving these.

"Distance education has been offered for many years by us, our methods have continually evolved and improved."

—(External research respondent from a university)

Piloting and Field Testing

Using a pilot process to test online learning prior to its introduction was cited as an important step in the introduction of online learning by 16% of respondents from external organizations.

How are other similar external fields of practice using online learning technologies?

These respondents noted the importance of testing their online courses with a select group of users in order to gain stakeholder input so that problem areas could be identified and improvements could be made before wider introduction. Some incorporated stakeholder feedback informally; others used a more formal and structured evaluation process. Either way, such organizations were convinced of the importance of "getting online learning right" ahead of time in order to increase success.

"We introduced online learning using a pilot process. This means that goals were set and results measured at various milestones. At these junctures, plans were altered in light of the results. Overall, the procedure was smooth, owing to the fact that the implementation was carefully planned."

—(External research respondent from a government department)

Funding and Organizational Capacity

Sixteen percent of respondents from external organizations identified organizational capacity as a factor in the introduction of online learning.

These respondents noted that sufficient funding for staff, including facilitators, managers, content developers, technologists, administrators, etc., as well as funding for online learning platforms, marketing, and professional development were all critical to the successful introduction of online learning. Further, respondents from several organizations mentioned that lack of funding was an ongoing challenge that could greatly impede their ability to deliver online learning successfully.

Respondents from not-for-profit organizations in particular reported that they would not have been able to develop or offer their online training without special project funding which was typically received from government sources. As well, some respondents mentioned that ongoing sustainability of their online training was a concern because it had been developed with one-time project funding and they had not yet identified how it would be sustained.

"The initial introduction went well, but without dedicated staff time to our online initiatives the whole thing fell into disuse."

—(External research respondent from a not-for-profit organization)

High Level Support for Online Learning

Fourteen percent of respondents from external organizations noted the importance of having high level internal or external support as online learning was introduced.

They described how this support could be internal, such as from the board of directors or senior staff, or it could be external, such as from the provincial or federal government. For example, one provincial government announced a major funding initiative where online learning would receive government support because it was viewed as a tool to provide important economic and educational benefits in that province.

Other respondents noted that having an organizational champion for online learning made a significant difference in the successful implementation of online learning. In fact, respondents from several organizations noted that their online learning initiative languished because they did not have a champion and that solid senior organizational support and resources would have been needed in order to make their training a success.

"The president of the college at the time supported online training and therefore put in place a team. This allowed us to forge ahead in the distance learning world and create a name for ourselves."
—(External research respondent from a college)

Motivation

As an important factor in the implementation of online learning, motivation was cited by 14% of respondents from external organizations

For some, motivation was a positive factor, as highly motivated participants eagerly took their online training. As well, some organizations found that participants deliberately selected online learning because it fit their personal and work needs. As such, they were highly motivated to learn using this modality.

Respondents from other organizations reported mixed reactions: some motivated participants did not adapt well to online learning and some participants who had expressed initial reluctance eagerly adapted to the new technology.

For other organizations, a lack of participant motivation had a negative impact on the introduction of online learning. Some respondents from

external organizations indicated that their stakeholders did not see the need for online learning and as such, they were not willing to try it out. Others indicated that some of their stakeholders were not motivated to try new ways of learning and preferred to stick with "tried and true" learning methods.

"Not enough people in our province see the need and benefit of online learning so introduction has been slow."

—(External research respondent from a not-for-profit organization)

Meeting the Needs of the Target Audience

Fourteen percent of respondents from external organizations indicated that a key consideration as they implemented online learning was to know their target audience and keep their needs clearly in mind.

Some organizations were membership-based organizations and as such, if they did not clearly align their online training with member needs, they could jeopardize the support of their membership. Others were completely fee-for-service organizations. They noted that if they did not tailor their courses closely to client needs, then people simply would not enrol, and online learning would no longer be feasible for them.

Other organizations kept in mind geographic barriers and needs. For example, some organizations served northern, rural, or remote areas of Canada, and in doing so, their implementation of online learning was a critical strategy in meeting the learning needs of people in their geographic region.

Still others considered the demographics of the group they served. For example, it was noted by respondents representing several youth-serving organizations that because the Internet tends to be the preferred milieu of youth, those providing training to youth needed to follow suit. Other organizations served a more general audience but still considered other types of participant needs, such as a lack of time or money to travel to face-to-face training events, or busy schedules—all of which made online learning attractive.

"To provide services that will engage youth, we go where they are: online."

—(External research respondent from a not-for-profit organization)

Technical Support

Twelve percent of respondents from external organizations noted that access to technical support, especially in the early stages of adapting to online learning, was important for many participants. Respondents noted that being able to offer easily accessible technical support was a crucial element with which to increase the comfort level of participants who were learning online.

Respondents from both large and small organizations were among those mentioning technical support as a factor in the success of their online learning programs. However, because of their larger size and capacity, typically it was larger institutions—particularly universities and colleges—that offered enhanced support (such as 24-hour technical support). Some organizations offered technical support directly via their own organizations. In other cases technical support might also be offered via the platform itself (e.g., *BlackBoard*) or via a call centre.

"We offer a call centre as the first point of contact to provide learning assistance and support to students."
—(External research respondent from a university)

Pre-Existing Skill Level / Aptitude

Twelve percent of respondents from external organizations noted that introducing online learning was easier if participants had at least a basic knowledge of technology as well as an overall aptitude and skill set that was conducive to online learning.

Some respondents indicated that when participants were comfortable with technology and computers, they were much more likely to be successful online learners. Prior to the training session, some organizations clearly articulated the general aptitudes and skill sets that were helpful for effective online learning (e.g., being self-directed or having basic computer skills) in order to help people decide whether online learning was likely to be effective for them. Some mentioned that they had realized there was a steep learning curve for some participants and these organizations deliberately built in time and support for these participants.

"We made it clear to potential learners that online learning takes discipline so that they could make informed choices before deciding to participate. If they aren't disciplined, there is less engagement during the sessions."

— (External research respondent from a not-for-profit organization)

Pre-Planning and Research

A key strategy cited by 10% of respondents from external organizations was to engage in pre-planning and research in order to make the transition to an online learning environment more positive.

Planning was conducted by various groups and individuals, such as senior management, a small group of champions, or a planning team made up of interested stakeholders.

Respondents also deemed research important and reported their organizations researched areas such as:

► How could online learning methods provide new or better ways of offering training, resources, and information to their members?

► How could they make an effective transition from print-based information to web-based learning?

► What types of online learning platforms might be most suitable for their organization?

► What were effective practices for content development and facilitation?

"Overall, the procedure was smooth owing to the fact that the implementation of online learning was carefully planned."

—(External research respondent from a government department)

Early Adopters

Nine percent of external organizations noted that they implemented online learning by first introducing it to people who more readily embrace and adapt to technology.

For some respondents, working first with early adopters was a deliberate strategy. Their organizations selected early adopters in order to test out their online curriculum, platform, and instructional strategies with a willing, motivated, and skilled group of participants. They learned from this experience and further adapted their courses for a more general audience.

Other respondents reported that their organizations introduced their initial online learning initiatives to a general audience, but found that almost all of the participants tended to be early adopters. Some organizations found that though they offered online learning to all, people self-selected and early adopters chose online learning, while people who were not as comfortable with technology chose face-to-face training or correspondence learning.

"We are currently working with the early adopters to online learning or highly motivated people; we haven't figured out how to work with less motivated people."

—(External research respondent from a not-for-profit organization)

Gradual Introduction

Nine percent of respondents from external organizations indicated that they introduced online learning by using a gradual, phased-in approach.

Some took care, for example, to reassure stakeholders that online learning would not replace the face-to-face training that they had received in the past; instead, online learning was designed to augment existing training opportunities. Others deliberately used a gradual approach to get people used to the idea of online learning. For example, at an annual conference they might showcase the possibilities offered by online learning. Some wrote a regular feature article on online learning opportunities in their newsletter or asked people who had been involved in online learning to speak to their peers about their experiences. The overall approach was to introduce online learning in a phased-in, non-threatening manner.

"We introduced online learning slowly and as people got used to it and saw its potential, the uptake has increased."

—(External research respondent from a government department)

Conclusion

In summary, the Getting Online external research team found that external organizations used a wide variety of creative and practical strategies to introduce online learning in their organizations.

The diverse range of responses indicates that strategies to introduce online learning can vary. While there were some overall promising practices and solid strategies (e.g., providing initial and ongoing participant support, actively engaging in effective marketing, offering training to online instructors, and developing solid online content), there was no one set approach to introducing online learning. Instead, flexibility and a focus on the varying needs of participants, and on the needs, skills, and organizational capacities of individual organizations must be considered.

SURVEY: Question Six

Question Six of the Getting Online research with external organizations was:

> *What future do you see for the use of online or distance training or instruction, support or professional development methods in your organization?*

For this particular question, the external team received 59 responses out of a possible total of 62 responses. Seven people participated in both the survey and the key informant interviews. However, since these respondents discussed different issues relating to future trends or provided new details and angles from which to consider the future of online learning, their survey and interview responses are tracked individually and are organized below from the highest to the least frequency of occurrence.

External research respondents foresaw a positive future for online learning, and they identified a wide variety of future trends. Exploring new technologies and expanding current online learning opportunities were cited most often.

Respondents cited other future trends, including increased quality of online learning, more access to adequate resources to support online learning, and increased access to training opportunities. They predicted other popular future trends such as short-term training based on immediate needs, blended learning, and engagement in more effective promotion of their online learning opportunities.

An additional future trend identified by respondents from external organizations was having online learning become fully embedded in their organizational mission. Although virtually all respondents foresaw a positive future for online learning, they predicted an additional trend will be to identify challenges that could prevent or inhibit future growth.

Exploring New Technologies

A significant future trend identified by slightly over half of external research respondents (53%) was their intention to explore new

technologies, new online learning platforms, and various options and trends in online learning.

Respondents intended to explore online learning technologies in a wide variety of ways. Some respondents indicated their intention to explore specific types of online learning (i.e., *Moodle, Breeze Presenter, RSS* feeds, etc.). Some external respondents indicated that they did not have specific outcomes or technologies in mind, but that they generally wanted to explore various online learning trends, teaching tools, technologies, and options for delivering the best quality online education. Respondents from other organizations felt that they had been reacting to technology and the possibilities offered by online learning and that they now wanted to investigate the possibilities for online learning in a more full and systemic way.

The desire to introduce more synchronous, interactive features (such as using webcams or live audio-visual online training with headsets and microphones) was mentioned by many respondents. Others expressed a strong interest in trying out short-term, highly interactive online learning in formats such as webinars and video streaming.

As well, respondents often mentioned their intent to explore the possibility of offering web-based video conferencing for meetings and training. Some were researching or were already in the beginning stages of incorporating Web 2.0 social networking tools such as wikis, blogs, and *YouTube* materials into their existing online courses. The desire to enhance current courses by adding new multimedia features was another commonly expressed goal. A few respondents mentioned wanting to try out the use of virtual worlds such as *Second Life* for educational purposes.

Another highly regarded feature was the creation of podcasts, online discussions, and online access to presentation slides so that people who were unable to attend conferences and training events could access the workshops, slides, and other related material online. Some respondents stated their intention to explore in the future new technologies for blended learning (i.e., the combination of face-to-face and online learning environments).

Several respondents noted that technology quickly becomes obsolete and that they intended to keep abreast of changes so that they could continually explore, upgrade, and incorporate emerging technologies which would enhance people's learning experience. They reported that they and their organizations want to remain fully open to future emerging technologies for online learning and to not limit their thinking.

Some respondents wanted to use the same online learning platform as they had previously, but they wanted to "breathe new life" into their online course by adding new technologies such as multimedia and interactive elements. These respondents noted that new technologies could lead to improvements in course design, teaching methods, and online communication and collaboration between participants.

Many respondents from external organizations spoke of their desire to develop or to further enhance online communities and online collaboration experiences. Some also mentioned that they currently used online communities or engaged in online collaboration and that they were aware that more user-friendly technologies were now available that could allow for improvements in these activities.

"The sky is the limit and an open mind goes a long way! We don't get stuck in old technologies, just because they are comfortable. We try to look to the future: like the youth we serve."
—(External research respondent from a not-for-profit organization)

Expanding Current Online Learning Opportunities

Another commonly cited future trend was expanding current opportunities. Almost half of external research respondents (47%) noted that in the future, they would like to expand what their organization currently provided in terms of online learning.

Some respondents noted that their current online learning opportunities were becoming increasingly popular—the factor driving their desire to expand. Others saw expansion as a valuable opportunity because their initial online training had been so successful that expansion was a natural outcome. Some respondents desired to further expand in the future because of the unparalleled access offered by online learning.

Many respondents acknowledged that they wanted to expand into new technologies (e.g., webinars and video conferencing) and into new types of online learning (e.g., blended or synchronous learning). Some wanted to expand by moving to a new online learning platform (i.e., *Moodle*). Respondents also mentioned often their desire to develop new content and resources or revamp existing content. They also wanted to add new web-based training modules. As well, many hoped to enhance their current offerings by creating more dynamic and interactive online learning opportunities.

Still other external respondents attributed their organizations' ability to expand into new markets in the future to online learning. For some, this expansion meant offering online learning to new client groups (e.g., Francophones, Aboriginal people, youth, volunteers, or other specific groups) or to under-served client groups such as people with disabilities.

For others, online learning meant a geographic expansion to reach rural, northern, and remote areas, to expand into other provinces, or, as in several cases, to deliver online learning to international audiences. For others, it meant an overall expansion to wider, general audiences.

Often, expanding to new audiences required respondents and their organizations to revise existing online learning materials to tailor them to the needs of these new audiences. In other cases, it meant translating material into French or other languages or making material more culturally relevant for other groups such as Aboriginals or new Canadians.

Respondents from some organizations felt that they had a unique and specialized area of expertise and that they could further share this knowledge with a wider audience by expanding their online learning offerings. Governance, public policy, mental health issues, crisis intervention, services for newcomers to Canada, corporate citizenship, volunteer management, fund raising, and risk management were just some of the areas of specialty that external research respondents hoped to share via online learning in the future.

Some respondents stated that their organization's desire to expand online learning by offering workshops, training events, or board meetings online that had formerly been held face-to-face was being fuelled by the potential costs savings in terms of travel, accommodation, and meeting space.

Some mentioned that although they were keen to expand, they lacked the knowledge and know-how about how to expand in terms of their knowledge of technology, online facilitation, or content development. Such organizations wished that best practice information and training on these topic areas was more readily available. On another front, others noted that while they desired to expand in the area of online learning, their ability to expand would be limited by finances and staff time.

> *"We see our organization expanding its markets with online to other parts of Canada. Online can help us do this. As a small organization with a national mandate, online is the only way to create such an expansion."*
>
> —(External research respondent from a not-for-profit organization)

Increasing the Quality of Online Learning

A third of external research respondents (34%) identified the need to increase the quality of online learning as a future need.

The most commonly noted suggestion for improving online learning revolved around knowing how to develop and design courses for online delivery; many respondents indicated that there was a strong need for more training in this area. Some respondents observed that some organizations do not understand how to create high quality online content and such organizations tended to instead take existing face-to-face content and merely place it online without adapting it for an online learning environment. As one respondent noted, *"many academic courses that bill themselves as online are really just glorified correspondence courses. They aren't really online in any meaningful way."*

Others noted online instruction is a complex and demanding task and instructors needed initial and ongoing training and support in order to be effective in this rapidly evolving field. Some of these respondents also noted that as online learning grows and expands in the future, offering effective training for online instructors will become increasingly important.

Some respondents from external organizations believed that more user-friendly technology and better online learning platforms were needed in order to improve future quality. Others believed that deliverers should gain a better understanding of the various technological possibilities for online learning in order to implement the technologies that were best suited to participant needs. Another area identified to increase future quality was the need to better train instructors in the use of the various technologies for online learning.

Respondents also stated that in the future, online learning needed to be well-planned, well-thought-out, and well-supported. They argued that not all educational institutions were currently treating online learning in this fashion to the detriment of participants. Other respondents noted that online learning had happened in a random, "hodgepodge" manner, based on the individual skills and interests of instructors and professors in their organization. Further, they noted that overarching institutional standards, protocols, and support mechanisms needed to be set in order to improve quality. Some mentioned that providers should evaluate their online learning with participants as well and carefully consider the results and make the necessary changes to ensure future improvements to online learning.

How are other similar external fields of practice using online learning technologies?

Several respondents from external organizations mentioned the need to become more knowledgeable and innovative in their training design to accommodate client needs and technological opportunities and limitations. In addition, several thought technology was somewhat over-used in their organization. These respondents noted that the technology was there to support learning and that the technology was not an end in itself. They noted that it will be increasingly important to find the right balance in using technology appropriately and organizations should not get carried away with too many technical "bells and whistles." One respondent noted that *"the appropriate use of the technology given the situation is important. The point isn't to just use technology for the sake of using it; it's to use it to deliver content."*

Some respondents noted that they knew from various feedback (i.e., from users or from their own instincts or knowledge as educators) that they needed to increase the quality of their online learning but that it was difficult to know where they could access information and resources on how to improve in this emerging field of practice. The need for best practices training in online learning was often mentioned.

A few respondents stated that as online learning becomes more prevalent and readily available from a wide variety of sources, participants will demand higher quality online learning. Respondents acknowledged that standards will have to improve to meet the needs of these more savvy users. Others mentioned that improvements should be ongoing because technology and participant needs were always evolving; for these respondents, continual exploration of the trends and options for delivering the best quality online learning was a must for all deliverers.

"Unfortunately, many deliverers do not understand the importance of quality online curriculum and instruction. Too many think you can just 'dump' current face-to-face content online, without considering the differences between face-to-face and online learning environments."
—(External research respondent from a university)

Need for Adequate Resources

Almost a third of external research respondents (31%) stated that access to adequate financial and human resources was a key component for the future of online learning.

Many external respondents noted that future growth in online learning in their organizations could not occur without adequate resources and sustainable funding to support items such as:

▶ staff time for content development

▶ staff time for facilitation

▶ staff time for participant support

▶ online learning platforms and technologies

▶ training for instructors

▶ maintenance costs for technology

▶ technological support

▶ staff time to revise learning materials and activities

▶ staff time to promote online learning

▶ staff time to learn best practices in online learning

▶ staff time to research and implement emerging technologies

"I see a healthy future for e-learning if properly resourced and managed (to ensure effective content development and marketing to stakeholders."

—(External research respondent from a not-for-profit organization)

Increased Access to Training

Just over one quarter of external research respondents (27%) cited the ability of online learning to increase access to training as a future trend.

Some respondents felt that online learning could greatly increase future access to both training and resources. These respondents noted that in many communities, required training was not available and they believed that online learning could greatly increase accessibility. These respondents noted that online learning inherently reduced the barriers of geography and as such, greatly increased access to both training and resources.

Respondents predicted that in the future, online learning would allow their organization to increase access to training opportunities in rural, remote, and northern communities where online learning was sometimes the only way to access needed training. Some also mentioned increasing future access to online learning in other regions of Canada or internationally. Respondents frequently mentioned that web-based

access to training and resources meant that people would be able to have unparalleled access because these opportunities were available "anytime and anywhere."

Several respondents from external organizations mentioned that the cost of attending face-to-face conferences and training events were prohibitive for many. Some wanted to increase access to workshops sessions and resources by providing podcasts of conference sessions or by making conference materials available for downloading via their websites. Others also discussed the ability of organizations using online learning programs to increase access to experts with specialized knowledge on issues such as health, policy development, or Aboriginal affairs in other areas of their province or indeed across the country. In the future, these organizations hoped to be better able to share their expertise with a broader audience.

Another important access issue identified for the future was to ensure online learning was more accessible for busy Canadians because people could take needed training at times and locations convenient to them. Respondents also noted that online learning was more effective in allowing busy people to access just the amount of training content they needed and wanted. They explained further, mentioning that in the future, access would increase because online learning is more cost-effective for the participant, since the barriers of travel time and travel costs have been removed. Also, respondents stated that some online courses were free or were offered at a reasonable cost.

"Online has much wider access and can go to areas where we could never dream of going with face-to-face."
—(External research respondent from a not-for-profit organization)

"Just in time" Training

A future trend identified by 17% of external research respondents was the need to offer online training in shorter blocks of time, based on immediate, short-term needs (sometimes called "just in time training"). Some respondents believed that because of the time pressures facing Canadian workers and families, in the future, people will want shorter, more practical training and they noted that online learning is ideally suited to meet such needs.

Several respondents described how this short-term, practical, focused, and specific training was in high demand amongst their client groups and that

their organization was striving to adapt towards this kind of learning. As one respondent explained, *"Effective learning is now like Dell's 'build your own computer' concept. People want bits and pieces of learning curriculum that they need NOW."*

Some respondents stated that the future trend of many people demanding shorter, more practical training required educators to revise their thinking and delivery in order to respond more effectively to this emerging need.

"We want to better serve time-strapped professionals. We have noticed a huge time shift. People are busier than ever before. We think shorter, online courses are the wave of the future."
—(External research respondent from a not-for-profit organization)

Challenges to Future Growth

While almost all respondents believed that the future of online learning is positive, 17% of external research respondents also identified some important challenges to its future growth.

Specifically, they identified the following challenges to the future of online learning:

Challenges with technology:

▶ some technology is not user-friendly

▶ technology can become obsolete quickly

▶ content needs to be updated regularly for online learning to remain current

▶ it can be hard to keep up with all of the emerging technologies

▶ there is poor Internet connectivity in some areas of Canada

Challenges with content and instruction:

▶ the need to improve the quality of online learning in terms of content development and instructional strategies

▶ the need for instructors to receive training in how to more effectively develop content and facilitate online learning

▶ the need to move away from the hype around online learning and focus on creating excellent content and facilitation

Challenges with resources:

- ► online learning can be expensive in terms of content development and facilitation, learning platforms, technological support, and ongoing maintenance costs
- ► online learning needs to be properly resourced and managed
- ► it can be difficult to keep up with the demand
- ► it can be hard to meet specialized needs

Challenges with attitudes:

- ► the need to educate people about the benefits of online learning
- ► some people have had negative experiences with online learning and may be reluctant to try again

"There are challenges: existing structures such as time tables, teacher recruitment, and course evergreening[1], to name a few. Still much work and energy is needed."
—(External research respondent from a school board)

Blended Learning Opportunities

Offering more blended learning opportunities was a future trend identified by 15% of external research respondents.

These respondents typically wanted to offer blended learning because they believed that offering an "online only" option was not an effective learning experience for their particular participant group. They noted that their participants required the warmth and group bonding experience afforded by face-to-face training combined with the ease of access provided by online learning. They believed online learning could complement and augment — but not replace — the traditional training opportunities offered by their organizations.

These survey respondents identified many innovative combinations of blended learning, including:

- ► Sending out a training CD ahead of time to give participants basic information, followed by a face-to-face training event and regular communication via a listserv.

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1   "Course evergreening" was defined by this respondent to mean keeping a course up-to-date and current.

> ▶ Holding a face-to-face training event then following up in one month's time with an online, print-based discussion group.

> ▶ Holding regional face-to-face training sessions, followed by asynchronous online sessions and video meeting technology.

"I see future best practices in e-learning as involving a combination of synchronous and asynchronous learning models, and blended delivery models using technology and methods that best meets the needs of the educational institutions and the students."
—(External research respondent from a college)

Online Learning is Embedded in an Organization's Future

Fourteen percent of respondents from external organizations indicated that in the future, online learning was no longer merely an option for them; it had become fully embedded into the core of what they did.

These external research respondents noted that their organizations were now fully committed to this mode of delivery and that offering online learning had become a standard rather than an optional component of their service. They noted that offering online learning was an integral and critical strategy for their organization because this modality allowed access to a wide audience, it was cost-effective and time-effective, and it successfully met the needs of their client group. As a respondent from one organization noted, *"It is our belief that online learning is the way of the future."*

Several respondents noted that they had in fact moved fully away from offering any face-to-face training and their organizations were now only offering online learning opportunities.

"Simply put, e-learning is at the core of our mission."
—(External research respondent from a government department)

More Effective Promotion

And finally, 8% of external research respondents stated that more effective promotion of online learning was a future trend. They spoke of the need to do a better job of future promotion both to the general public and to specific target audiences (e.g., youth, rural residents, or Aboriginal people). As well, respondents mentioned the need to promote online learning to new audiences in the future (e.g., promoting online learning

How are other similar external fields of practice using online learning technologies?

opportunities across Canada, to remote areas of their province, or even internationally).

These respondents noted that creating more effective promotional strategies internally, developing partnerships, finding champions, developing new contacts, and more effectively engaging the media could help with future promotion.

"Also needed are diverse and extensive contacts all across Canada to help with promotion."
—(External research respondent from a not-for-profit organization)

Conclusion

In conclusion, the Getting Online research external team found that external organizations foresaw a strong and positive future for online learning and they identified a wide variety of trends, options and possibilities for the future.

Commonly identified trends were exploring new technologies, expanding current opportunities, increasing the quality of online learning, accessing adequate resources, and increasing access to training opportunities.

Respondents identified other important trends for the future such as offering short-term opportunities, offering blended learning, embedding online learning in organizational missions, and marketing more effectively. Some respondents also identified challenges to the future growth of online learning.

The positive and growing future for online learning as envisioned by the external research respondents and their creative and dynamic plans to move their organizations forward in this area bodes well for the future of online learning in Canada.

Part Two Conclusion

In this section of the report, the external team has summarized the research results received from respondents to the external (non-literacy) survey and key informant interviews. Respondents answered one of the key research questions, i.e., "How are other similar, external fields of practice using online learning technologies?" They analyzed each of the six questions asked in the survey and key informant interviews as well as the demographic information provided by the respondents.

The responses they received to the external survey indicate that online learning is alive and well in Canada. Online learning opportunities are available both through institutionalized learning (i.e., high schools, colleges, and universities) and through a wide variety of training providers, including not-for-profit groups, government departments, and others. Providers offer online learning using a number of approaches including learning management systems, self-study modules, and live events. The subject matter being offered via online learning opportunities is as varied as the organizations that offer it.

Most respondents to the external survey and key informant interviews expressed the opinion that online learning is now a permanent fixture in the Canadian learning environment. As a result, they are incorporating new and different techniques and technologies in their efforts to continue providing training and education to their respective audiences.

getting online
THE GO PROJECT

PART 3

What forms of online technology are being used?

External Website Research

As described in the Methodology section, there were two external research goals as part of the overall GO Project goal of researching and identifying best practices for online learning and distance education in the Canadian literacy community:

1 To research how other similar, external fields of practice are using online learning technologies; and

2 To research what forms of online learning technology are being used

In Part Two of this report, the external team explored the first goal. In Part Three, they examine the second goal which was addressed by conducting an extensive website search to identify online learning providers external to the literacy field. The website search resulted in a comprehensive list of 106 websites external to the literacy field. This listing provides a representative overview of online learning in Canada. A small number of international organizations were also included in the research.

The external team sent surveys to the key contacts representing all of these websites and 43 survey responses were returned. Results are described in Part Two of this research report, along with the 19 responses to the key informant interviews conducted.

The website research revealed an interesting array of online learning technology and training content that, together with the survey and interview results, forms a more complete picture to address the second research goal: "to research what forms of online learning technology are being used." To further round out this research about online learning technology, the external team contacted nine key literacy organizations across Canada. That information is included at the end of Part Three of this report.

The external team used Internet search engines to find examples of online learning and distance education in similar fields of practice to literacy across Canada. Search parameters included terms such as "university," "college," "not-for-profit," "online training," "distance education," "e-learning," "online learning," and more. These terms were also combined with the names of Canadian provinces and territories.

Examples of online learning and distance education were found in all regions of Canada, in both official languages. Organizations that were identified through the external website research provided a wealth of information about the online learning and distance education they provide, as well as their development, successes, challenges, and future planning.

The information that they were able to gather was greatly dependent upon the organizational website itself. For example, some organizations provided details about the development of their online learning, the technology used, and other information on the website itself, while others did not. Some organizations provided open access to the actual training or education but others restricted access to registered participants.

This pan-Canadian compilation of external organizations that offered distance education and online learning via website provides a succinct overview of the type of technology being used, the array of organizations that offer some type of online learning opportunity, and the creativity of these organizations in offering a wide variety of content. Based on the data gleaned from just these 106 external websites, it is clear that training or education on almost any topic can be found electronically. It is also apparent that Canadian organizations, large and small, are making innovative and creative use of technology in online learning.

Demographic Summary

Our research on websites included external organizations that worked at the national, provincial, regional, and local levels. It also included government departments, private companies, academic institutions, charities, and not-for-profit organizations. The research incorporated organizations that provided school-based education as well as those that offered content-specific training to their members, their volunteers, or their employees. The demographic overview of the websites included in the research is as follows (note: percentages do not always equal 100 because of rounding):

Geographic Region Served

▶ Provincial organizations: 70 (66%) (representing Prince Edward Island (2), Nova Scotia (8), Newfoundland and Labrador (6), New Brunswick (7), Quebec (5), Ontario (18), Manitoba (2), Saskatchewan (7), Alberta (6), British Columbia (6), the Yukon (2) and the Northwest Territories (1))

▶ National organizations: 19 (18%)

▶ International organizations: 10 (9%)

▶ Regional or local organizations: 7 (7%) (these organizations can cover more than one province or territory, or operate within just one local area of a province)

Type of Organization

▶ Not-for-profit or Charity: 55 (52%)

▶ University or College: 25 (24%)

▶ Government Department: 10 (9%)

▶ Private Company: 7 (7%)

▶ Unable to determine: 5 (5%)

▶ School Board: 4 (4%)

Technology Used

The Getting Online external website research revealed that many different types of technology were being used, from formal learning management systems to in-house platforms to creative use of emerging technology. Examples of the technology approaches used reveal some clear trends, with the most popular approach being a website offering some type of modular learning. Learning management systems, synchronous learning, asynchronous learning, blended learning and *Web 2.0* use of technology were also trends identified in the research.

Modular Approach

The most common trend noted amongst the 106 external websites reviewed was the use of learning or training modules. Forty-four (42%) different organizations were identified as offering some type of online learning using a modular approach. Sometimes these modules were designed as self-study, independent learning. Sometimes they included facilitation or mentoring, often with an accompanying discussion forum on the website. Some organizations incorporated testing and assignments with the modular approach.

Web-based modules were offered by some organizations as stand-alone training and by others as part of a blended learning opportunity. With blended learning, web-based modules were used to supplement or enhance face-to-face training or another online learning event.

This modular approach was used by a wide variety of organizations including large educational institutions such as colleges and universities, government agencies, charitable organizations (both national and local), professional associations, private enterprise, recreational associations, faith-based groups, advocacy groups, and other not-for-profit organizations.

On the majority of websites (34 of 44, 77%) using this approach, the modules were available to anyone who visited the website, resulting in ready access to training content when people want it. However, 10 of the external websites reviewed required registration before the modules could be viewed. Of these 10, some also required a fee to be paid that provided access to the modules for a limited amount of time. For the websites that specified time-limited access, the time range that learning modules were available ranged from 2 months to 1 year.

The content offered using this modular approach was as varied as the external organizations who offered training this way. For example:

► Not-for-profit organizations learned about board governance.

► Youth explored issues related to mental health.

► People with disabilities learned where to find support and also discovered coping strategies.

► The general public discovered the history of their province.

► Newcomers to Canada improved their English skills, learned how to complete a résumé, and discovered what life in Canada is all about.

► High school students worked towards high school completion certificates, diplomas, and more.

► People learned about the laws in their province or territory.

► Coaches for recreational sport learned team-building techniques and other coaching strategies.

► Volunteers learned about the cause they support and were trained for their volunteer tasks.

► Firefighters, police, and other emergency workers learned about safety regulations, new laws, policies, and more.

► Charitable organizations learned about fundraising techniques and regulations.

► Individuals learned about plain writing techniques.

► Citizens interested in advocacy discovered how to lobby corporations and governments for change.

► Adults and students learned driving rules and techniques.

► Snowmobile enthusiasts learned about riding techniques and trail regulations.

► Avalanche rescue teams learned search and rescue techniques.

► College and university students followed up on lectures and worked towards a degree or diploma.

► Members of a particular trade group kept up to date with new rules and regulations.

► Independent Canadian music artists learned about industry regulations and more whether they were at home or on the road touring.

Learning Management Systems

The second most common approach to providing online learning or distance education noted from the external website research was the use of learning management system software.

Learning management system software is designed to enable the education or training provider to not only deliver content, but also to track user participation and attendance, progress, marks, and more. It usually incorporates a number of tools including discussion forums, assignments, learning content, chat rooms, and other features that can simulate the traditional learning environment.

Although seven organizations reported using software that had been developed specifically for their purposes, 24 (23%) other training and education providers identified in the web-based research used commercially available learning management system software. Larger institutions such as universities and colleges often reported using more than one type of learning management software; the most commonly used were Blackboard/WebCT and Moodle.

Blackboard/WebCT

Of the online learning provider websites that the external team reviewed, 11 (10%) were identified as using *Blackboard/WebCT* for their learning management system. All of the organizations found to be using this system were colleges or universities, including a provincial network of 22 community colleges. That does not mean that other organizations do not use *WebCT/Blackboard;* simply that the research team did not encounter other organizations' websites that identified this software as the learning management system used.

The type of education that was offered by these institutions included a range of degree, diploma, and certificate programs, as well as part-time and continuing education studies. For example, through online learning using Blackboard/WebCT, students can pursue studies in:

▶ Accounting

▶ Early Childhood Education

▶ Computer Software Applications

▶ Teachers of Adults

▶ Health Sciences

▶ Justice

▶ Military Arts and Science

▶ Marketing

▶ Home Inspection

▶ Teacher Training for Online

Moodle

An equal number of external organizations (11, 10%) were identified as using Moodle for their online learning platform. As well, a few organizations that responded to the survey noted that they were using another type of software at the time of the research, but would be moving to *Moodle.*

Because *Moodle* is shareware, there is little initial cost associated with using this web-based system. A few organizations reported that cost was indeed a factor in their choice of using *Moodle.* Other organizations commented that it was a user-friendly system. Both the factors of cost and ease of use may explain why *Moodle* was popular with a wide range of online learning and distance education providers, from small not-for-profit organizations to large educational institutions such as colleges and universities.

Some of the ways that *Moodle* was being used to deliver online learning included:

▶ University and college degree and diploma programs as well as continuing education courses. For example, students pursued studies in art, business, science, computers, education, language, nutrition, and much more.

▶ Professional development for teachers, mental health counsellors, and others

▶ Courses to help abuse survivors move toward employment and self-sufficiency

▶ Faith-based education

▶ Volunteer training

Other Learning Management Systems
Other learning management system software that was being used by the organizations identified in the website review included *Desire2Learn* (five sites), *A-Tutor* (two sites), *Adobe Connect* (one site), and *The Learning Manager* (one site). These specific learning management systems were used by educational institutions, not-for-profit organizations, and one government department. The types of online learning delivered using these learning management systems included school-based education, training for volunteers, and professional development for member organizations.

Communications Software

The external team identified 18 (17%) external training and education providers across Canada that also used communications software (e.g., *FirstClass*) to provide training.

This type of software is often used for meetings, professional development workshops, online collaboration, and other occasions when people need to communicate online but do not necessarily require a complete course curriculum, marking, or tracking mechanisms that are features typically included in learning management system software.

School-based institutions described using communications software in addition to learning management systems. Other organizations included in the website research reported using communications software for purposes such as staff training or volunteer training.

FirstClass communication software was popular with literacy organizations, particularly in western Canada, but was also used by other organizations as well, including a provincial government department.

Other organizations' specific references to software used for professional development training in particular included *WebEx* (three citations), *Microsoft Live Meeting* (two citations), *Microsoft Sharepoint* (two citations) *Breeze Presenter* (one citation), GoTo (one citation) and *WebTrain* (one citation).

Web 2.0

As described by Wikipedia (2008), Web 2.0 is a term describing the "trends in the use of World Wide Web technology and web design that aims to enhance creativity, information sharing, and, [most notably,] collaboration among users" (**http://en.wikipedia.org/wiki/Web_2**). Web 2.0 is not a specific technology or type of software; it is more about new ways that software is being used.

Web 2.0 approaches use the strengths of the Internet as a platform and build on those strengths. *Web 2.0* technologies cover a wide range of areas including social networks, developed using sites such as *Facebook,* and *MySpace;* blogs; file and database sharing, through sites such as *FlickR* and *YouTube;* podcasts; and *RSS* feeds, to name just a few. As noted in section 2 of the GO external research, the increased use of emerging technologies for online learning is a significant trend.

Many of the websites reviewed incorporated one or more Web 2.0 technological approaches to enhance their online learning and distance education. Organizations large and small, including school-based institutions, charitable organizations, government departments, and not-for-profits reported using these technologies.

For example, podcasts were used to add audio content to text-based modules. Blogs were encouraged as a way for participants in both school-based educational courses and professional development courses to communicate and share their learning experiences. Wikis were used by two colleges, one university, and one government department. *YouTube* videos were added to university courses to provide visual examples of learning content.

Furthermore, the external team identified training that incorporated *Web 2.0* technologies to include:

▶ Employment-related training for women

▶ University and college courses

▶ Training in mental health

▶ Training for youth on employment and other issues

▶ Professional development for government departments about new initiatives

▶ Support for victims of abuse

▶ English as a Second Language training

▶ Training for recreational sports organizations, including coaching and updates on provincial or sport-related regulations

▶ Professional associations including safety-related training, engineering and computer-related groups

▶ Faith-based education for both clergy and lay people

Technology Not Known

The external team were not able to identify the specific technology used by 26 (25%) of the external organizations. Some websites described their training as including, for example, a "learning management system" or "training software" without specifically identifying the software or platform. In some instances, the website in question required registration or a fee to be paid before being able to view the training or learn how it was offered.

Five (5%) organizations indicated that they had developed their training software in-house or had contracted the development to an outside organization, but they did not identify the specific software used. Three of these organizations were associated with CANARIE (see www.canarie.ca), a Canadian not-for-profit organization supported by its members, project partners, and the federal government. CANARIE's mission is to accelerate the development and use of the Internet through the adoption of faster, more efficient networks. The three organizations identified through the research had received funding to develop systems for use within their organizations. The training offered included teaching radar, school-based education, and music education.

Asynchronous Learning

Based on the content of some external organizations' websites, the external team determined that the organization offered online learning or distance education asynchronously, often promoting "anytime, anywhere" learning. Some offered a blend of asynchronous learning with "live" learning opportunities. Because this was not always explicitly stated on the website, it is not possible to determine the full extent of these claims.

Synchronous Learning

Some of the external organizations reported on their websites that they offered synchronous training opportunities. Examples of this included a staff professional development opportunity or a university lecture, a

focus group or a staff meeting, a group discussion as part of a text-based synchronous course, or a planning meeting for a trades association. The external team identified two popular pieces of software that are used across Canada for this type of interactive, live training event: *Elluminate* and *Saba Centra Suite.*

Both *Elluminate* and *Saba Centra Suite* are web-based, synchronous software platforms which enable participants to communicate via audio, video, and text chat. They also provide interactive whiteboards and the option to upload and share documents and applications.

Elluminate was used by six (6%) of the organizations identified by the GO research team. All of the organizations that reported using *Elluminate* also indicated that they used it in addition to, or in combination with, other online learning approaches such as learning management systems like *BlackBoard.*

Saba Centra Suite was used also used by six organizations (6%). Two of these six used *Saba Centra Suite* as their main training platform. The others used it in addition to other types of software, such as *Interwise,* a similar type of synchronous platform used by one government department identified in this research.

Blended Learning

There are a variety of ways that face-to-face and online learning can work in combination with each other. For some external organizations, this combination of approaches meant using online technology to enhance or supplement traditional face-to-face education and training.

43 (41%) of the external organizations' websites reviewed during the research were found to use more than one type of online learning technology, and also to use more than one method of providing training. For many external organizations, it was important to provide more than one way for participants to communicate. This approach to online learning programming is often referred to as "blended learning."

For some external organizations, blended learning referred to a series of options within their online offerings. For example, a series of self-study modules might be accompanied by podcasts so that students can listen while reading through the material, or listen to additional information provided to enhance the text-based modules. Most courses delivered via a learning management system were described as including enhancements

such as discussion forums, listservs, video clips (e.g., YouTube, etc.), blogs, voice-over-Internet technology (e.g., Skype) and other features to provide a variety of ways to address the different learning styles of course participants.

As well, some training courses were designed to incorporate face-to-face sessions and online assignments. In other cases, online modules were provided as additional information to accompany a face-to-face training event. Sometimes online discussion forums were provided as a way for a classroom instructor to communicate with students between classes.

The decision to provide information in more than one way, or to offer a combination of face-to-face and online learning opportunities was not limited to one type of provider or to a particular size of organization. Also, the content or topics being offered using a combined approach was as varied as the organizations that offered the training.

Clearinghouses

The external team identified nine organizations (8%) that acted as clearinghouses or hubs for online learning and distance education. These organizations did not deliver training or education themselves; instead, they provided a website that directed users to the education or training they were looking for. For example, one national website was designed to help emergency workers find training related to their professions (e.g., gun safety, provincial regulations, or counselling techniques). Another national website included links to a variety of language training courses for newcomers to Canada.

Conclusion

From this research into 106 external websites, it is clear that online learning and distance education is an important component of learning in Canada. Organizations of all sizes and in all regions of the country offer a variety of learning opportunities for virtually any content area.

Individuals or corporations seeking educational or training opportunities can choose from a number of approaches including school-based education, professional development opportunities, content-specific training, certified courses, self-paced modules, and other options. Users can learn synchronously or asynchronously. They can register for a time-limited course or they can visit a website when they need particular information. They can participate in training using just one

type of technology or a number of types. They can also learn using any combination of online approaches, or they can combine online with face-to-face training.

The opportunities are as varied as the training itself and the potential participants. Clearly, online learning and distance education are thriving in Canada.

Literacy Technology Research

As part of its review of online learning and distance education technology being used across Canada, the external team also analyzed eight leading Canadian literacy organizations to discover what technology they were using for online learning and how they were using it. Like the external organizations whose websites were included in the technology research, these organizations offered a pan-Canadian overview of the type of technology being used for online learning and distance education. The information for this portion of the research was gathered via a survey that contained six questions.

Extensive research into online learning and distance education was conducted with 112 literacy stakeholders from across the country and is discussed in depth in the literacy research section of this report. In this section, the external team report only on research conducted with respondents from eight organizations who are long-term users of technology and online learning in the Canadian literacy field.

Five of the eight literacy organizations surveyed for the technology review were provincial networks or support organizations. One was a national database that brought together a wealth of information for Canadian literacy practitioners, one was a training provider that had offered an online course on a number of occasions, and the eighth provided technical support for a learning system (FirstClass) used throughout the western provinces.

Eight of the survey respondents provided training to literacy practitioners; one also reported on its experience with providing training to literacy learners. These literacy organizations were located in Nova Scotia, New Brunswick, Ontario, Alberta, and British Columbia.

Question One

Question One of the literacy technology survey was:

" *What platform (or platforms) are you using (or have you used) to deliver online training?* "

Respondents from 3 of the 8 organizations included in this component of the research reported using a single platform. Five respondents to the survey reported their organization did not use one type of platform exclusively. They used a variety of the platforms and approaches as described below, often for different purposes. Survey respondents did not always specify how technology was used but simply stated the platform.

► *Moodle:* One respondent from a provincial network reported using *Moodle* for communicating with its members. Another network will be moving to *Moodle* in the near future for both communication and training purposes. Two respondents from provincial networks reported that they had used *Moodle* for online learning in the past. At the time of the survey, one network was using it to help practitioners learn how to develop curriculum for literacy learners using *Moodle.*

► *FirstClass:* One provincial network respondent reported using a system based on *FirstClass* for both communication and training. The trainer delivered a course using *FirstClass.*

► *Saba Centra Suite:* Two respondents from provincial networks reported using *Saba Centra Suite* for synchronous training events. These organizations delivered training to literacy practitioners on a variety of topics including family literacy, proposal writing, outcomes-based program evaluation, volunteer management, essential skills, and strategic planning.

► *Elluminate:* Two respondents from provincial networks indicated that they used *Elluminate* for regular communication with their members.

► *Websites:* According to one respondent, a provincial network had developed self-paced modules housed on a website that provided anytime access to literacy-related topics for its members including instructional strategies, program evaluation, volunteer recruitment, strategic planning, and more. As well, the national organization identified in this research hosted a website that offered a digital library and resources.

► *Discussion groups:* Two respondents from provincial networks reported having used print-based discussion groups about specific topics of interest to their members. One of the networks used this method to provide volunteer-related training. Another offered an ongoing forum where literacy practitioners discussed current literacy initiatives, government policies, funding, and more.

► *WebEx:* One provincial network respondent reported using *WebEx* for conferencing purposes.

► *In-house Learning Management System:* One provincial network respondent reported that the network designed its own learning management system to provide training for literacy learners.

► *Desire2Learn:* One provincial network said that it had used *Desire2Learn,* but did not elaborate on how it was used.

► *Web 2.0:* One provincial network respondent reported that the network had examined and incorporated Web 2.0 technology approaches including blogs, *Skype, FlickR, YouTube,* and *WebQuests.*

► *Listservs:* The national organization hosted listservs for the Canadian literacy community and also developed and maintained websites for literacy organizations.

"With the explosion in the variety of Internet tools and development in e-learning applications in recent years, we have not focused on the idea of a single platform solution for the delivery of training. Instead, training is presented using a loosely integrated blend of systems."
—(Respondent to the literacy technology survey from a provincial network)

Question Two

Question Two of the literacy technology survey was:

> *Why did you pick the particular platform (or platforms) you used for online learning?*

The most commonly cited factor (five mentions) for choosing a particular platform or approach was the variety of options and flexibility available. For example, *Saba Centra Suite* was chosen by one provincial network because it offered synchronous training, which allowed literacy

practitioners to share information in real time, complete with audio feed, whiteboards, and more. Other reasons for choosing a particular technology or approach included ease of access, ongoing availability, and the ability to print content. Two respondents noted that the choice of platform should respond to learning needs; there is no "one size fits all" solution.

Other reasons for choosing a platform (or platforms) included:

► *Ease of use:* Four respondents said that ease of use was an important deciding factor. For them, participants should be able to learn the key features of the software quickly and easily. The software should also be user-friendly from the content development and instructional points of view.

► *Cost:* Cost was cited as the key factor by three provincial networks. *Moodle* is available at no cost, and *Elluminate* was made available to one network through a partner organization. The network that used *Saba Centra Suite* did so because it was made available to them by their provincial government.

► *Sustainability:* Two provincial networks reported that the ability to sustain and support the platform chosen was important.

► *Future considerations:* Another reason for choosing a particular platform involved future planning. One provincial network did not want to be using old technology so chose both *Elluminate* and *Moodle* because they would continue to be useful and relevant in the future. The organization that provided technical support for the *FirstClass* system chose this platform because at the time it was superior to anything else that was available. They also chose it because it was widely used by organizations outside of literacy, particularly by educational institutions in North America.

► *Information sharing:* One provincial network said that the communications software they used keeps their members together and informed.

"In our opinion, Moodle seems to have the features, diverse options, flexibility, and portability that best serve our members."

—(Literacy technology respondent from a provincial network)

Question Three

Question Three of the literacy technology survey was:

> *What are the strengths of the online learning platform you used?*

Some areas of the country are not equipped with high speed Internet, and this limitation was given as an important reason for choosing a particular platform or approach by five literacy technology survey respondents. One provincial network chose *Elluminate* because it works well on both low speed and high speed connection. Another provincial network chose Moodle for the same reason. A third provincial network chose to provide training using a web-based modular approach for this reason. For another, *FirstClass* was chosen because it works well, regardless of the end user's computer set-up.

Respondents from three provincial networks stated that both *Moodle* and *Elluminate* were easy to learn, even for those with limited technical skills. The respondent from a network that used *Saba Centra Suite* echoed these comments, as did the respondent from an organization that provided technical support for *FirstClass.* One of the respondents from a network stated that its members wanted something user-friendly, uncomplicated, easy to navigate, and easy to learn. The trainer used *FirstClass* because it was straightforward and user-friendly. The respondent from the organization that developed an in-house system also reported that ease of use was one of its strengths.

"If I can do it, anyone can!"
—(Literacy practitioner's feedback to a provincial network)

The benefits noted by respondents from two of the organizations using *Moodle* were that this system offered a variety of features and options. One respondent noted that there was a high degree of user-control, allowing them to customize the software for their needs.

The benefits attributed to *Saba Centra Suite* were its ability to provide synchronous sessions, the stability of the software, the variety of features available (i.e., surfing to websites, breakout rooms), the number of people who could be online at one time and the ability to archive sessions for future use.

For respondents, the benefits of a modular web-based approach were listed as: ease of access, no required login registration, no need for special software, content can be easily printed, users could pick and choose the information they needed, and few bandwidth issues.

One respondent from a provincial network said that its approach of using a variety of platforms gave them the flexibility and power to explore and take advantage of new technologies.

One respondent noted that a web-based system — whether via a website or a web-based software, rather than a standalone software — could be accessed by participants from any computer. Participants did not need to install anything to their own computers, thus making the learning accessible.

"Literacy practitioners wanted something user-friendly, uncomplicated, easy to navigate and accessible to every computer. We initially used it just as a communication method, but once we started using it as a training tool, people didn't want to change to something else."

—(Literacy technology survey respondent from a provincial network)

Question Four

Question Four of the literacy technology survey was:

"*What are the weaknesses of this online learning platform?*"

Cost was cited as a weakness by three respondents to the literacy technology survey. Complex platforms such as *Saba Centra Suite* or those that are developed in-house can be expensive to maintain and are only available to literacy organizations through partner agencies or funding bodies.

Two provincial networks cited the need to maintain the technology as a weakness. Both organizations that used *FirstClass* said that it required support which was no longer available or was only available at a high monetary cost. Modules housed on a website also required some maintenance.

Another weakness noted was the time it took to prepare content to upload to the online learning platform.

The respondent from the provincial network that used *Saba Centra Suite* reported that the technical needs of this type of software could be a weakness. Because it is synchronous, it requires higher bandwidth to function at an optimal level, and this was not always available to participants. Other technical issues noted by two survey respondents included security protocols that may have been established, making installation of the online learning platform or the use of some features problematic for some users.

For respondents, the potential weaknesses of a web-based modular approach included a lack of interaction, the potential for links to expire, or having the information become outdated.

One provincial network respondent commented that most online learning platforms and software did not adequately address the interface needs of users with low literacy skills because of a lack of plain language.

One provincial network respondent reported that that their approach to online learning was unique when it was first introduced. However, technology has evolved rapidly and now they are no longer unique because of the wide variety of learning options that are available.

Question Five

Question Five of the literacy technology survey was:

> *Would you use this platform (or platforms) again and why or why not?*

According to respondents from the provincial networks that used both *Elluminate* and *Moodle*, they would indeed choose both of these platforms again because they are regularly being upgraded and because they respond to audience needs.

The provincial network respondent and the trainer who used *FirstClass* said they would absolutely use it again because their training participants were familiar with it, and that was important. The trainer said *FirstClass* had best met her needs as an online instructor. The organization that

provided technical support for *FirstClass* also said they would continue to use it because it has wonderful capabilities and possibilities and is constantly evolving and improving.

The respondent from the network that used *Saba Centra Suite* reported they would use it again because user feedback indicated participants liked it. They would also continue to use it because they liked the synchronous approach as well as the ability to record sessions for later use. The software itself was stable and provided good audio and visual quality. For this network, the only reason not to continue using *Saba Centra Suite* would be if the organization had to assume the cost of the platform itself.

According to the respondent from the network that developed web-based modules, they would use that approach again because it provided training for people who were not interested in an interactive approach or for people who were looking for some content-specific topic. The respondent from the national organization that offered a resource-rich online library also reported that it would continue to use this website-based approach because it is highly accessible and meets a specific need.

Two respondents reported that they would continue to use the platforms they currently use but remain open to new methods.

"It is always good to keep an open mind about platforms and be open to newer platforms and technologies."

—(Literacy technology survey respondent from a provincial organization)

Question Six

Question Six of the literacy technology survey was:

" *What type of online learning platform or features would you like to use in the future? And why?* "

Four respondents said that they would like to explore the use of other technologies and approaches. The following features were specifically noted: video in the form of webcams to further enhance the level of interactivity and develop the connection between participants and facilitators, personal learning environments, e-portfolios, gaming, social software, *YouTube,* podcasting, *Flickr, Delicious,* wikis, and accessibility and adaptability software.

One provincial network respondent reported that it would always choose a platform or features that introduced technology to literacy learners. The respondent felt that introducing technology in literacy agencies has helped learners become more a part of the 21st century and has also reduced marginalization.

According to respondents to the literacy technology survey, other "wish list" items for the future included:

► *Integrated mail:* One provincial network respondent stated that there needs to be an integrated mailing system included in the software.

► *Synchronous learning:* One provincial network respondent reported the network's desire to explore synchronous learning.

► *Built-in tutorial:* The trainer would like to see platforms developed that have similar features to *FirstClass.* She would like it to include a built-in tutorial.

► *Technical support important:* One respondent to the survey said that technical support is important regardless of the platform or technology used.

► *Hands on options:* One respondent reported that the organization would like to be able to manipulate documents more easily to allow for hands-on activities during synchronous sessions.

► *Audience needs:* Another respondent said that whatever is chosen must meet the needs of the target audience (i.e., literacy practitioners). For this respondent, the learning platform must be easy to use, accessible by any organization, and provide effective and ongoing electronic communication.

Conclusion

There appears to be a variety of approaches used by literacy organizations for the delivery of online training and education to literacy practitioners. Because the literacy technology survey was only administered to eight organizations, it is difficult to establish trends. However, based on the comments from respondents who represented various forms of literacy organizations, there does appear to be an interest in continuing to explore the possibilities and the technology that is available.

Literacy organizations are often small and have limited funding. Cost is a factor that needs to be taken into consideration. Access to appropriate technology, in particular available bandwidth and connectivity, is also an important factor. However, it is apparent that literacy organizations across the country are exploring the possibilities offered by online learning, and it is also apparent that they are interested in continuing to do so.
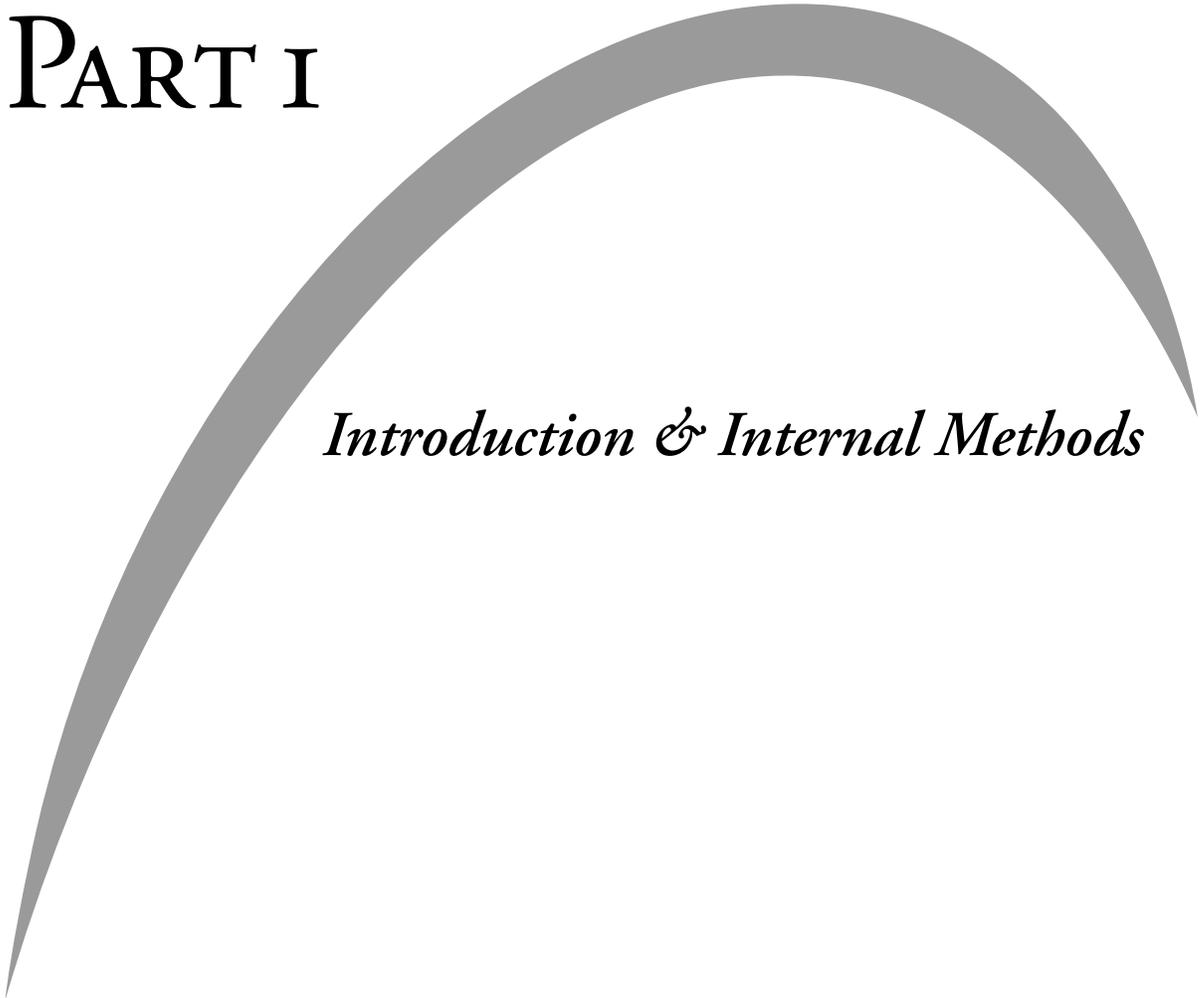
getting online
THE GO PROJECT

Internal
Research
Report

A Research Report on Online Learning for Canadian Literacy Practitioners

getting online
THE **GO** PROJECT

PART I

Introduction & Internal Methods

Introduction

The first objective of the Getting Online (GO) Project was to gather, analyze, and disseminate information about the current and potential state of online training for adult literacy practitioners in Canada. Lynn Best, Deborah Morgan, and Diana Twiss, three members of the GO team—referred to in this document as the "internal team,"—were responsible for conducting this research into online learning in the Canadian literacy field. One team member, Diana Twiss, was responsible for analyzing the data and writing the internal research report.

The internal team had one research goal within the overall GO Project goal of researching and identifying best practices for online learning and distance education:

▶ To research how practitioners in the Canadian literacy field were using online learning technologies in their practice

In order to achieve this, the internal research team was assigned the task of developing questionnaires, conducting interviews, and holding focus groups with stakeholders regarding the current state of online training in the literacy field. In addition, the internal team was responsible for completing a literature review of using online learning as a vehicle for professional development for literacy practitioners.

Information obtained is analyzed in Part Two of the internal research report. In the following section, an overview of the methods used to accomplish these objectives and activities is provided.

Internal Methods

In May 2007, the entire GO Project team met in Edmonton, Alberta for a planning meeting. At that meeting, the team outlined the process for gathering data from the literacy community. They agreed that it would be necessary to collect data from both experienced and inexperienced users of technology for professional development. They also agreed that every region and province of Canada would be provided with an opportunity to participate in and contribute to the research.

The type of data they wished to collect to meet the project objectives was defined as:

▶ The types of online or distance education tools or methods that the literacy practitioner had experienced

▶ The objectives or purposes of any online training

▶ The results of the training and how it was evaluated

▶ The advantages and disadvantages of online learning compared to face-to-face learning

▶ How the online program was introduced to participants

▶ The future use of online learning for literacy practitioners

In keeping with standard research practices, the entire research project was vetted through and approved by the Research Ethics Board of Athabasca University.

In consultation with the other team members and project evaluator, they decided on the following strategy to gather data:

▶ An Internet based survey would be posted on the NALD website that would be accessible to the national literacy community.

▶ The provincial coalitions and national organizations would be contacted to create awareness of the survey and to encourage practitioners to complete the survey.

▶ GO team members would actively promote the survey in their individual provinces and to their provincial and national contacts.

▶ Follow-up telephone interviews would be conducted with selected practitioners who had completed the online survey.

▶ A list of key informants who had significant presence in the literacy community or who had been active in professional development of literacy practitioners would be developed for the purpose of conducting telephone interviews.

▶ Where the opportunity presented, focus groups would be held with literacy practitioners.

The entire research team was aware of the importance of ensuring that all regions and provinces of the country had the opportunity to provide information regarding online learning and professional development in the literacy field.

The first step of the data collection process was to design instruments to survey literacy practitioners. They decided on an online survey and telephone interviews. The online survey consisted of six questions with

additional space to add other comments. The survey questions were open-ended, designed to enable respondents to describe and/or explain their experiences or lack of experiences with online learning. The survey also provided practitioners an opportunity to rank their interest in six areas of training:

▶ Introduction to online learning

▶ Online course curriculum development

▶ Using/choosing distance education technologies

▶ Providing learner support in an e-learning environment

▶ Developing online facilitation skills

▶ Creating an online community

These areas of training needs were identified through the literature review and from the expertise of the team members. The survey also included an area where respondents could list additional training needs.

The survey was housed on the GO website. Content was developed by GO team members while technical support and hosting was offered by the National Adult Literacy Database (NALD) at **www.nald.ca/ gettingonline**. In order to promote the survey, the internal team contacted provincial literacy coalitions and national literacy organizations, asking them to promote the survey through their newsletters and other networks. In addition, they used their networks and contacts to promote participation in the survey. The survey was hosted on NALD from July to November, 2007.

In total, 93 internal surveys were completed through the NALD website. These completed surveys came from all geographic areas of Canada, both urban and rural. The respondents were literacy practitioners from a variety of types of programming including adult literacy, family literacy, volunteer-based training, and instructor-lead training. The respondents had varying levels of experience in online learning, ranking themselves from beginners to experienced users.

The intent of the project was to document many types of online learning experiences in the national literacy community, as well as to document barriers to participation in online learning. The internal team developed a list of key informants for telephone interview to gather data related to the program objectives. Key informants were identified as individuals who were active in their literacy communities and would have experiences to share regarding online professional development for literacy practitioners.

It is important to note that the research team deliberately sought key informants who had a variety of online learning experiences.

Key informants were identified in two ways. First, the internal team created a list of key informants from their knowledge of the literacy community in Canada. As well, the online survey data generated additional key informants through respondents' contributions of relevant information. They took care to ensure that the diverse regions of Canada were represented in the key informant interviews.

Using a telephone survey guide that was developed by the GO research team members, the internal team completed a total of 26 key informant interviews from July to November 2007. The telephone interviews provided an opportunity to researchers and respondents to go beyond the online survey responses and deeply explore issues related to professional development for literacy practitioners using online learning.

During the research phase, two opportunities to conduct focus groups arose. During October 2007, three team members of the GO project (Joanne Kaattari, Vicki Trottier, and Diana Twiss) facilitated a focus group with the Board of Directors with a provincial literacy organization. The focus group was held through *Saba Centra Suite Symposium,* a computer conferencing system made available by the organization. Eight current and past Directors of the organization and one staff member attended the session. The Directors came from every region of the province. Every person in this focus group had some experience participating in online learning and several had facilitated online learning courses.

The focus group session was 1 hour in length, during which participants explored the following questions:

▶ What factors made your online learning experiences either successful or unsuccessful?

▶ What is effective online facilitation?

▶ What additional support(s) do you wish you'd had to make your online learning experience more effective?

▶ In future, if you were to develop or facilitate your own online learning initiative, what training or skills do you think you would need to do this effectively?

In November 2007, the second focus group was held during the Newfoundland and Labrador Literacy Institute in St. John's,

Newfoundland. Participants came from diverse areas of Newfoundland and Labrador. This focus group session was a face-to-face, one hour discussion facilitated by two of the GO team members. Seven participants, including four instructors, one learner, one volunteer, and one career development specialist from the provincial government attended this session. Not every person attending the session had experienced online learning as a practitioner or as a learner.

The focus group discussion focused on:

▶ Benefits and challenges of online learning

▶ Professional development needs of literacy practitioners

▶ Attitudes towards online learning

In December 2007, the internal team took the data collected from the surveys, key informant interviews, and focus groups, and reviewed and coded them using Atlas.ti, a computer software program which enables users to identify and systematically analyze complex phenomena in qualitative research. By using this software, they were able to organize notes, annotations, codes, and memos from the large volumes of text generated from the surveys, interviews, and focus groups. This data was further analysed in winter 2008 and will be used to support and underpin all future GO initiatives.

In addition to the online surveys, key informant interviews, and focus groups, the internal team conducted a review of current literature related to online learning and literacy. Sources of information for the literature review included literacy publications, academic journals, published and unpublished printed materials, government reports, online articles, and websites. The literature review included information on defining distance and online learning, a historical overview of distance and online learning, benefits and challenges of distance and online learning, online learning and literacy, and the learning needs of literacy practitioners for online learning. The literature review was primarily written by one team member with input and support from the entire team. It was further reviewed and validated by Dr. Pat Fahy of Athabasca University.

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PART 2
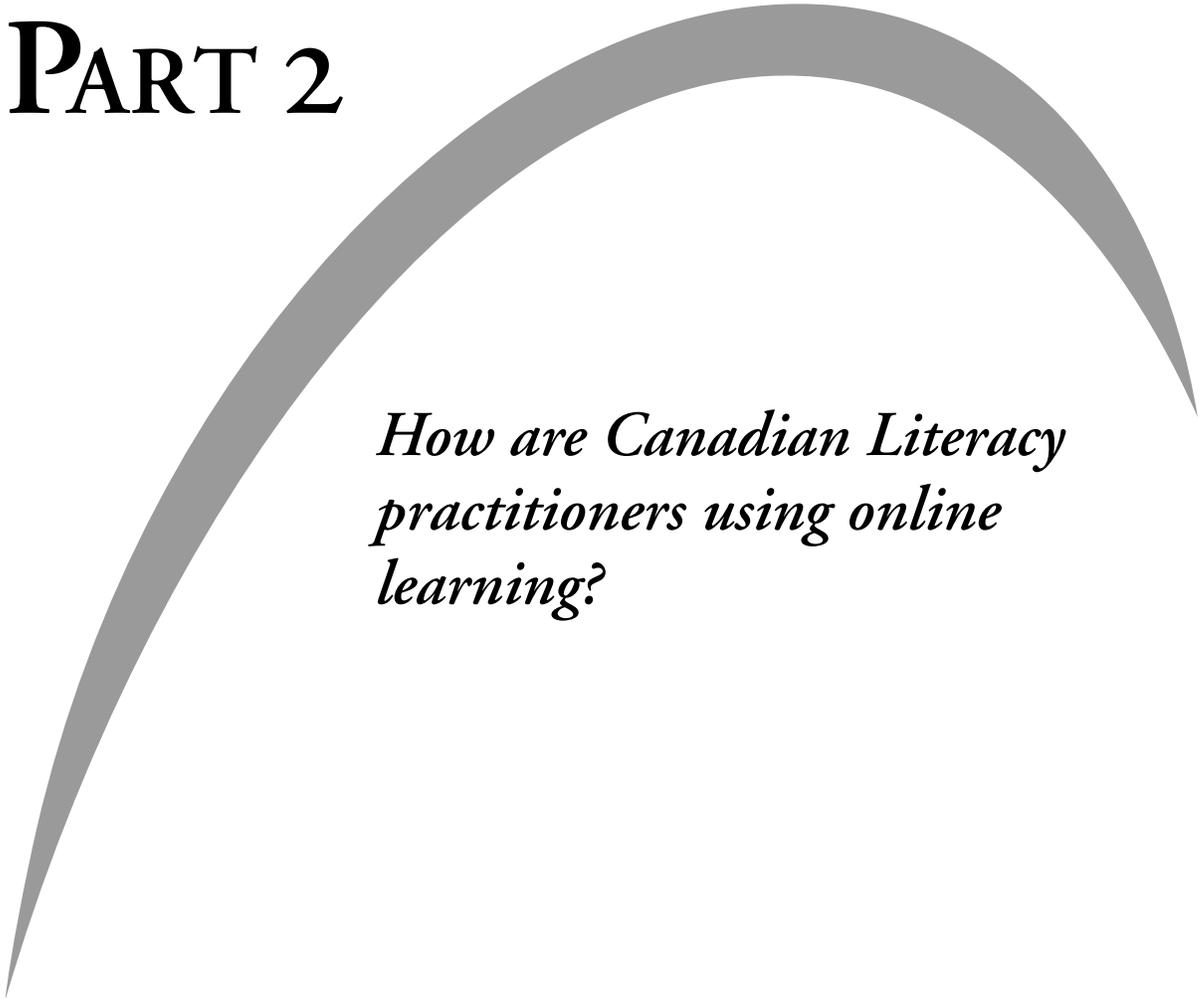
How are Canadian Literacy practitioners using online learning?

Introduction

Part Two contains the following information:

▶ Demographic results of the surveys and key informant interviews.

▶ **Question One:** What online or distance tools or methods do you presently use for your own or for staff training, professional development or support?

▶ **Question Two:** What are the objectives or purposes of the online or distance practices you presently use?

▶ **Question Three:** What results, good or bad, have you obtained with your online or distance learning or support practices, and how did you determine this?

▶ **Question Four:** Do you find online or distance training or support methods produce different results from face-to-face methods or strategies? If so, what are the differences?

▶ **Question Five:** How were online or distance training or support methods or tools introduced? Did the introduction go smoothly?

▶ **Question Six:** What future do you see for the use of online or distance training or instruction, support or professional development methods in your practice?

As was the case in the external research and survey, the questions in the survey and asked during the key informant interviews were not directive, nor were participants prompted towards a certain response. As a result, respondents may not have provided information about all of the activities they may have been engaged in. Trends are reported in order of priority.

Demographic overview of respondents

The internal team developed the survey and made it available to members of the literacy community from June to November 2007. A total of 93 responses were received. However, it was determined that nine surveys were not applicable as the respondents were not from the literacy field. Four of these surveys were used by the external team. In total, they used 84 relevant surveys in this particular analysis.

In addition to the closed and open-ended questions, respondents also had the opportunity to provide further comments. At the end of the survey, respondents were also asked to provide further information about the programs they were involved in and to provide the following demographic data:

- ► Number of years of work experience
- ► Educational credential
- ► What province their program operates in
- ► Number of learners enrolled
- ► Number of tutors
- ► Affiliation
- ► Institution name

Although a considerable amount of information was obtained, some respondents chose to opt out of providing responses or did not fill out these fields consistently. Therefore, it is difficult to make comparisons across demographics.

Respondents were also asked to rank their level of interest for training in terms of the following:

- ► Introduction to online learning
- ► Online course curriculum development
- ► Using/choosing distance education technologies
- ► Providing learner support in an e-learning environment
- ► Developing online facilitation skills
- ► Creating an online community

Again, respondents did not consistently respond. Several ranked the categories 1–6 in terms of interest, some only ranked the top three categories that interested them, some simply marked an asterisk next to the ones that interested them.

The following list is, in order of importance, a final ranking of the key online/distance education needs and priorities identified by literacy practitioners across Canada in the online survey:

1 Online course curriculum development

2 Using/choosing distance education technologies

3 Providing learning support in an e-learning environment

4 Developing online facilitation skills

5 Creating an online community

6 Introduction to online learning

From this ranking, the internal team concluded that people were thinking about ways to use this new technology in their practice and needed additional training to be able to use it better.

Survey Responses by Province: 84 in total

The internal team made every attempt, through provincial and territorial literacy coalition newsletters and mailing lists, and numerous other contacts in the Canadian literacy field to obtain responses from each region of Canada. They did not receive any useable surveys from Quebec, Prince Edward Island, and the three territories. They did receive the following number of usable surveys from the following provinces:

British Columbia: 21
Alberta:. 11
Saskatchewan: 1
Manitoba: 6
Ontario: 39
New Brunswick: .1
Nova Scotia: 3
Newfoundland/Labrador: 2

Affiliations: 84 survey responses in total

Not-for-profit:. 49
College:. 18
School District: .8
University:. 3
University/College: 2

Those who were affiliated with multiple organizations or institutions:
School District/College: 1
Not-for-Profit/College: 3

Years of experience: from 78 survey responses

0–5 years:. 14
6–10 years:. 10
11–15 years:. .22
16–20 years:. .18
20+ years: 14

14 years is the median number of years experience
15.6 years is the average years of experience

In addition to the surveys, the internal team conducted 23 telephone interviews and three face-to-face interviews and held two focus groups. They identified interviewees through the surveys and from their own knowledge of the major players in their area. If interviewees were not survey respondents, they asked them the same list of questions from the survey, and probed into areas of their expertise. For example, if they had done a lot of online delivery, they asked them about what it takes to be an effective online instructor and about some of the challenges they have faced in that role.

In addition to the survey questions, the internal team asked other questions:

► What makes a good online facilitator?

► What technology is out there and what are the best ways to use it?

► What are the factors that lead to a person having a negative online experience?

► What are the factors that contribute to a positive online experience?

► What is considered to be a "good facilitation" skill?

► What are the common aspects of "barriers" to participation?

Interviews by Province or Territory: 26 in total

British Columbia: 4
Alberta:. 4
Saskatchewan: 1
Ontario: 7
Quebec:. 1
New Brunswick: 1
Nova Scotia: 3
Newfoundland/Labrador: 3
Northwest Territories: 2

Focus Group Sessions: 2 in total

CLO Board Focus Group:. . . . . 9 participants
NL Focus Group: . . . . 7 participants

Affiliations: 26 Interviews

Not-for-profits/Literacy Organizations: 17
College:. 4
University:. 2
Independent literacy practitioners/consultants: 3

1 SURVEY: Question One

Question one of the Getting Online research with Canadian literacy practitioners was:

> *What online tools and methods do you presently use in your literacy program for your own, or for staff training, professional development or support?*

All participants in the survey and the interviews responded to this question. The responses to this first question varied a great deal. The internal team did not provide a check list of technology, platforms, and software, so they had to rely on respondents' ability to list and identify what tools and methods or technology and platforms they used. Oftentimes respondents noted the methods they have used most recently, not the entire cadre of methods.

In terms of an analysis of the responses, it is important to note that the way respondents talked about distance tools, methods, and techniques varied a great deal. There does not appear to be a common, consistent vocabulary which enables users to describe the tools, methods, and techniques they use in their practice. For clarity in this report, "tools" are described as technology and the "platforms" used by practitioners refer to examples such as blogs, email, or *Skype.* "Methods" are described as the application of the software, the use of the tool such as database searches for learning materials, using *Saba Centra Suite* for a Board meeting, or *FirstClass* for Foundational Training in Family Literacy.

Summary of Survey responses:

Respondents reported they use their computers to search the Internet with the aim to enhance their practice and their knowledge in the field. They often mentioned the fact that the Internet enabled them to share knowledge, develop learning materials, keep up to date with initiatives in the field, and reduce isolation. The following is a list of ways respondents used online tools and methods, ranked by frequency:

▶ Communications: e-mail, listservs, conferencing services, meetings

▶ Research: Internet web-based searches, database access, general information seeking

▶ Asynchronous interaction on web conferencing services and listservs

▶ Online courses and other learning

▶ Synchronous interaction for meetings and training

▶ Participation in national projects

Choice of Technology

The following is not an exhaustive list, for there are many technological elements respondents omitted from the survey responses. For example, one respondent noted using *Elluminate* and *Skype*, but did not mention email or Internet searches. The internal team found it difficult to imagine that respondents would use such sophisticated software and systems and not use basic Internet functions.

Adobe Acrobat: 1	listservs: 1
BBC Skillswise: 1	*Moodle:* 1
Blackboard: 4	podcasts: 1
blogs: 4	*Powerpoint:* 1
Saba Centra Suite: 18	*Skype:* 1
chat: 2	telephone: 3
customized video-based, local web tools: 1	web classroom technology (Alphaplus and Alpharoute were cited): 13
Elluminate: 2	*WebCT:* 2
e-mail: 11	*WebEx* sessions: 1
FirstClass: 14	*Webinar:* 1
forums: 1	*WebKF:* 3
Google searches: 4	*YouTube:* 1
Internet and web-based page by page: 27	

Applications of the tools

In terms of the methods, or applications of the tools, the following is a list of websites, databases, and other e-materials respondents reported they regularly sought:

▶ Alphaplus

▶ Alpharoute

▶ CLO website

▶ E-newsletters from community organizations

▶ ESL and ABE websites

▶ Government of Canada website

▶ Literacy Alberta SHARE electronic conference (Moodle)

▶ Literacy BC Resource collection

▶ Membership sites for teaching materials and lesson plans

▶ National Adult Literacy Database

▶ Plain language tutor and text grading

▶ University and college online courses

▶ Websites of professional organizations

▶ Literacy coalition websites

Online training and courses

Twenty-seven (32%) survey respondents mentioned the online training they have taken. Many of the courses were foundational training for literacy practice. Some of the training mentioned is:

▶ Cambrian College online courses

▶ *Saba Centra Suite* online training

▶ Focus on Literacy Training Course

▶ Foundational Literacy Training

▶ Foundational Training in Family literacy (3 cites)

▶ General training and professional development (4 cites)

▶ IC3 training for teaching basic computer skills

▶ Literacy and Basic Skills (LBS) Practitioner Training

▶ Literacy Specialist Training in Manitoba

▶ Online courses (no specific details, 2 cites)

▶ Online training offered by Community Literacy of Ontario (3 cites)

▶ Online training seminars

▶ Research in Practice in Adult Literacy (RiPAL) course from Ontario Institute for Studies in Education (OISE)

▶ Teachers of English to Speakers of Other Languages (TESOL) online course (2)

▶ University course online (2)

▶ Writing Out Loud Training (2)

Summary of interview responses:

Thirteen of the 26 participants interviewed had also completed the survey. In instances where respondents' survey results were available, the internal team did not repeat the same questions; instead, they probed deeper into the issues raised and experiences noted in the respondent's survey results. For this reason, the data is analyzed separately.

The interview respondents were all highly involved in varying aspects of online learning or in positions where they can support the development of it, participating as an online learner or senior manager of literacy organization, facilitating or moderating conferences/courses, or promoting and developing online opportunities. Twenty-one of these respondents had experiences as an online learner, and 20 had experiences as online facilitators with varying degrees of success. They all expressed a comfort level with computers and technology. They used the Internet to communicate with colleagues, stay current on policy and practice, and identify funding and training opportunities. The respondents had literacy networks to which they belonged (e.g., The Hub, Literacy Alberta's Share), or were members of literacy listservs.

"I participate in the Hub (BC online conference), search NALD regularly for research documents and materials, read blogs and websites related to the community where I work, search and download materials from ESL and ABE websites, read online research journals and experiment with learner websites such as mouse aerobics and CABS online. I also took the Writing Out Loud course."

—(Interview respondent from college and community-based program)

Conclusion

Question One was intended to discover tools and methods currently being used by practitioners in the Canadian literacy field. As mentioned earlier, and as was also noted in the external surveys, the internal team received a vast assortment of responses, mostly because they did

not provide respondents with a check list or other kind of structured grouping of available responses.

What can be concluded from all the responses is that there were a great assortment of tools and methods used by members of the Canadian literacy community and that literacy practitioners were engaged in using this technology in a variety of ways.

Literacy is a continuum of skills, from basic and foundational skills, to more advanced and complicated applications in other settings. The internal team have found that the use of computers and the Internet in the literacy field follows a similar continuum of skills and stages of development, from basic, to intermediate, to advanced.

At the basic stage is the use of computers in e-mail and visits to websites to obtain information. With the exception of e-mail responses, the level of interactivity is fairly low. All respondents were at this level; if not, they would not have been able to access and complete the online survey.

At the intermediate stage, participants engaged on a deeper level using the computer as a research tool, engaging and interacting more with the technology and making judgments about the quality of the data and information to which they were exposed. For example, respondents reported they engaged in Google searches which took them to a variety of sites that required critical skills to assess the quality of the information. Respondents also reported they downloaded and uploaded materials and information and engaged in programs that websites offer (e.g., a website which allows users to make crossword and word search puzzles)

At the advanced stage of engagement, respondents provided examples of distributed learning. Respondents often told the internal team about face-to-face meetings, followed by online interaction using more than just email. Respondents used asynchronous programs such as *Moodle, WebCT,* or *WebKF,* and synchronous programs such as *Elluminate* or *Saba Centra Suite Symposium.* The internal team noted 20 respondents referred to their experience with and use of *Saba Centra Suite* and *Elluminate,* which are voice/visual/auditory online teaching platforms that require a high level of confidence with computer technology.

Clearly, it is evident that the survey and interview respondents used computer technology and the Internet. According to the respondents, a wide variety of platforms and software are being used in a multiplicity of ways to inform, engage, train, and inspire Canadian literacy practitioners.

SURVEY: Question Two

Question Two of the Getting Online research with Canadian literacy practitioners was:

> *What are the objectives or purposes of the online or distance practices you presently use?*

The internal team received responses to question 2 from all 84 survey and 26 interview respondents. They reported that they engaged in online or distance practices for a wide variety of purposes. Some respondents had extensive lists of objectives and purposes, which perhaps indicates that they had found ways to maximize the advantages and minimize the disadvantages online learning can present. Other respondents listed only a few items, such as email communication and database searches.

Fifty-nine (70%) survey and 20 (77%) interview respondents mentioned using online methods as a way to gather information, share information with other practitioners and *"provide people who live at some distance from [major city] with the knowledge and resources that they may find useful."*

Summary of responses

Respondents' objectives for their use of online tools and methods fell into five categories, which have been ranked by the frequency in which they were mentioned:

1 *Establishing and maintaining connections to the field:*

▶ To reduce isolation

▶ To develop relationships

▶ To reflect on practice

▶ To share experiences as a practitioner

▶ To follow up face-to-face meeting/training

▶ To network with other literacy organizations on local, provincial, and national levels

2 *As a way to do work:*

- ▶ Gathering and sharing information
- ▶ Coordinating projects
- ▶ Engaging with tutors and learners
- ▶ Engaging in collaborative work activities (e.g., research, writing, learning material development, strategic planning)

3 *To save time and money:*

- ▶ On travel and accommodations for training
- ▶ Searching for and obtaining relevant and current learning materials and research results
- ▶ Removing barriers of time and place for learners

4 *To get and to keep up to date:*

- ▶ As a mechanism for obtaining and sharing vital and current information about literacy practice, policy changes, funding opportunities, and learning materials

5 *To access formal and informal training opportunities:*

- ▶ To obtain "just in time" training
- ▶ To obtain certification

6 *To hone computer skills so respondents could work with learners more effectively*

"I would not want it to replace face-to-face, but it would be a welcome addition to what we have. Practitioners are generally working part time and have children at home; to be able to train is a luxury. To do it at home would be a great add-on. I would like to train tutors this way too. It often seems that I cannot get a group of 8 together in my small community to run a training session, but on-line it could be offered continuously at less cost."

—(Interview respondent from community-based organization)

Conclusion

Question Two was intended to discover the objectives and purposes for the online learning methods being used by members of the Canadian literacy community. Again, the internal team received an assortment of information because they did not provide a check list of potential responses.

Based on an analysis of the data, the internal team concludes that the Internet and use of computer technology provides members of the Canadian literacy community an effective way to stay connected to each other and to reduce isolation. It also gives practitioners a new way to do their work as they find ways to engage in collaborative projects online, to research and develop learning materials, and to work with learners and tutors in virtual classrooms. Practitioners who engage in online and distance learning are finding ways to save time and money on travel and accommodations to training events. It provides them with faster and less expensive access to learning materials and other sources critical to their practice.

The Internet and use of computer technology also provides practitioners with opportunities to receive training, whether formal in the sense of certification, or informal in the sense of knowledge of new approaches and knowledge. As well, the use of online technology gives practitioners access to innovative ideas and practice so, regardless of where they live, they can stay informed of policy developments and training opportunities. Finally, practitioners realize their learners need to be proficient and confident on computers in order to keep up with the rest of the world; this is a strong motivation for practitioners to learn more and develop their own skills and knowledge.

While online training and certification is not at the top of the list of respondent's objectives, the desire to learn more and to develop a multiplicity of skills related to their practice is a driving force behind many of their Internet searches and online engagements.

SURVEY: Question Three

Question Three of the Getting Online research with Canadian literacy practitioners was:

> *What results, good or bad, have you obtained with your online or distance learning or support practices and how did you determine these?*

> *"We would not say that our training is all things to all people or that it replaces face-to-face. It forms a valuable piece of the training puzzle by making online learning available to literacy practitioners who cannot access face-to-face training because of travel time, travel costs, lack of local availability or lack of time due to work or family schedules."*
>
> —(Survey respondent from a community-based organization)

The internal team factored the analysis below from the responses of 80 surveys and 11 interviews. Respondents identified many positive and negative results from online learning and from using online methods to obtain information. Although the survey was designed to probe their own online learning experiences, four respondents discussed the online learning results they observed in their literacy students. These are categorized into two different audience groups: literacy practitioners, who have certain skills and motivations to engage in online learning, and literacy learners. It was not the intent to examine ways that online learning is being used with literacy learners; therefore, the information received about use with learners, while noted, was not used in this analysis.

Question Four, which follows, is a comparison of face-to-face and online learning. Despite it being a separate question was often present in the responses to Question Three is mention of how online learning was better or worse than face-to-face.

> *"Definitely there are different results. The networking involved in face-to-face training cannot be duplicated. Otherwise the information passed on by the training/trainers is probably equivalent. Cost for face-to-face, the fee, travel, and time are significantly more, so we can access much more training by having online options."*
>
> —(Survey respondent, affiliation not reported)

Overall Analysis of the Responses

The internal team have categorized 46 responses as positive results and 35 responses as negative results. The positive results were wider ranging, whereas the negative results tended to cluster around frustrations with technology in general, and the learning mode in particular. The smaller number of negative results does not lead us to think that the positive results outweigh the negative. In fact, the very nature of the wording of respondents' negative responses, such as *"don't like to learn this way,"* and *"can't learn that way,"* reflect different learning styles or at least, learning needs not being met.

Respondents often listed more than one response, sometimes all positive, sometimes all negative, and sometimes a mixture.

Positive Results: 46 responses

The respondents who reported positive results have found ways to benefit from online learning opportunities and improve their practice by obtaining information from online methods.

In responding to the question about results, one respondent noted the changes she has observed in the field over the last 3 years. She reflected on how the results have changed and benefits have grown as the people she works with increase their skills with the technology and found ways to use the training being offered, despite numerous initial concerns about it replacing face-to-face training.

Respondents reported numerous positive results, from one respondent's simple and enthusiastic claim to having had *"Excellent results!"* without providing further explanation, to another respondent's elaborate and detailed response of over 150 words in length. The positive results fall into the following categories ranked by frequency:

► Increased access to professional development opportunities

► The ability to save time and money on training

► Improved skills and knowledge

► Increased networking opportunities

There were also several instances categorised as "mixed results."

Increased Access to Professional Development Opportunities and knowledge

> *"Online learning resource and environment development specific to the adult literacy community has opened access to trials and successes in online learning for thousands of adults. The blending and extension of these supports using video cameras, podcasting, blogs, etc. in a positive way keep adult literacy students and their practitioners abreast of the information highway and current with the reality of life in the 21st century. Access and support through training, opportunities and specific attention to needs is critical."*
> —(Survey respondent from not for profit organization)

A positive result noted by 16 (35%) respondents is the issue of access to learning opportunities. For respondents, access was critical in terms of the availability of online learning options and in terms of their ability to participate in the courses. It was also defined in terms of relevant and practical learning opportunities.

Respondents were enthusiastic about having greater access to resources and training and felt that more people in their organizations were able to benefit from training because it was available online. Respondents also noted that through online options, they were able to select relevant learning activities and have professional development that can take place on a flexible schedule.

The issue of increased access was expressed in terms of the following:

► **Access to learning opportunities despite geographic barriers**
This is an important issue that respondents mentioned often. Those working and living in rural areas of northern Ontario, Alberta, and British Columbia reported the need to travel to participate in training or have access to learning. Travel is not only expensive, but it is also time-consuming. In order to benefit from the amount of time it takes to travel, out-of-town training often involves an overnight stay or two. Finally, in addition to this travel time, participants must take extra time away from their work and home lives, which is inconvenient for many and impossible for a few. Online learning can take place wherever the respondent has access to a computer: home, work, in community.

▶ **Access to learning opportunities because it allows practitioners to take training that best suits their schedule**
Like most adult learners, literacy practitioners lead full lives with work, home, and community responsibilities. Respondents reported that having a learning mode they could engage in when they could fit it into their lives (e.g., from home in the early morning before work, during lunch hour, threaded somewhere during the working day, or after hours from home), made a big difference in people's ability to participate.

"We have had excellent results—I love taking training from my office and know that I can be available if required or multi-task (if needed). Otherwise, I likely wouldn't have taken the training if it meant going somewhere off-site."
—(Survey respondent affiliation not reported)

▶ **Access to learning opportunities that meets individual practitioner needs and allows them to work at their own pace**
In addition to a flexible schedule, respondents reported an important aspect of their successful result was being able to work at their own pace and being able to do as much or as little as energy and time allowed. Some respondents mentioned college and university online courses that were paced; however, this work was done asynchronously. So, while they benefitted from the structured aspect of the course, they reported a positive result because they did the "learning" whenever it worked for them.

▶ **Access to relevant materials**
Many respondents were not involved in online training or courses at the time of the survey and/or interview, yet were enjoying quick and inexpensive access to learning materials, both for themselves and also for their learners, that access to a computer, Internet, and printer allowed.

Improved Skills and Knowledge

"The results overall have been positive in providing training for myself, and materials and information for my students. I now have a better understanding of how my students learn, and have been able to find and use information on the Internet that is useful for my students to aid their understanding of different subjects, and assist in improving their reading and writing skills."
—(Survey respondent from school district)

When listing the positive results of online learning opportunities, 15 respondents (33%) mentioned the benefit of obtaining relevant, accessible, and practical information.

"I do believe we have better professional skills and one staff member received certification in Foundational Family Literacy."

—(Survey respondent from community-based organization)

In addition to skills and knowledge that benefit practice, respondents noted that they benefited from the increased computer skills they developed from working and/or learning online.

"Another good result I have seen in myself as a tutor because of using online and distance practices is confidence that I can keep pace with changing and emerging technologies ... I can learn a lot independently when and how I want to learn because I can access new resources anytime and from anywhere. I take risks in learning in and engaging in online communities more because of experiencing the long reach of online courses and distance learning possibilities."

—(Survey respondent from community-based organization)

Respondents reported learning more "content" and gaining field-specific knowledge. They also reported increasing their knowledge and skills in the use of computers as a mode of learning. Some respondents noted that this increased knowledge and comfort with computer technology and distance learning had the power to move them to higher levels of engagement, from taking a short online course to registering for and taking a Master's program online.

"I was also involved in the VALTA course a few years back, where much of our work was done online. That course not only was extremely helpful in my work, but gave me the courage to take more classes at the Master's level."

—(Survey respondent from college program)

The Ability to Save Time and Money on Training

"The on-line training course was great because it saved money and time in travelling to take a course. I could set aside the time within my own office time to do the course and had the rest of the day in my office."

—(Survey respondent from a community-based organization)

A positive result mentioned by eight respondents (17%) was the time and money saved by having online learning opportunities and by being able to use the Internet to find resources, to stay current, and to learn whatever was deemed necessary. This is closely linked to the topic of access addressed earlier; geography and busy schedules are some of the barriers to participation for literacy practitioners.

"Mostly good results. Living in the North it is often difficult to take advantage of all the training opportunities as cost for travel is significant. Face-to-face is always preferable but online is good alternative when cost and time are a factor."
—(Survey respondent, affiliation not reported)

It is important to note that the issue of saving money and time is from the vantage point of the recipient of the learning. Those who plan, organize, and deliver online learning tell a different story. Respondents acknowledged it costs more money and time to put together effective online courses than it does for a similar face-to-face session. The main cost is in the start up phase, when practitioners and instructional designers are developing all the new materials for the online environment, creating electronic slide presentations, and making printable versions of downloadable learning materials.

There is evident that within the Canadian literacy community, recipients of online learning have recognized the added benefit of saving time and money.

"Because I live in rural Alberta it is a real time and money saver for me to be able to do part of workshop/course requirements from home. Immediate feedback is essential and I still appreciate face-to-face contact with other participants and instructor."
—(Survey respondent from community-based organization)

As an aspect of saving time, respondents observed there were things they could do faster as a result of online learning. A few mentioned they liked the speed in which they could learn something and then get right back to work and apply that knowledge. They also noted they liked the speed in which they can pass information along to others.

Networking

In addition to learning new things and the possibility of achieving a credential, seven respondents (15%) noted the result of being able to be part of a network of learners, a cohort, or a community of learners within the region, province, or country. This online connection helped respondents feel less isolated, and gave them opportunities to share information and to collaborate on projects.

For those respondents who participated regularly in an electronic literacy network such as the Hub (which uses *FirstClass* software), this kind of regular access to the literacy field was described as a "lifeline." Respondents found support through the expertise of their colleagues and by being able to interact with many people at a given time. Electronic literacy networks are considered to be an essential element in British Columbia's, Alberta's, and Ontario's literacy infrastructures.

"If you include the electronic Hub …, the results are very good. I consider this service essential to my work. RLCs each work in their own regions and need this type of support network, both with each other, with the provincial organizations, and sometimes with the Ministry representatives who participate."

—(Survey respondent from community organization)

Online technology gave respondents opportunities to interact, to brainstorm for new ideas and concepts in adult learning, to share their woes, and to find solutions.

At the core of several positive results reported by respondents was their observation that people's satisfaction with their online experiences, in particular, the online courses they have taken, rested on their satisfaction with the quality of facilitation. Facilitation involved developing and delivering the online course, workshop or activity and supporting participants in a variety of ways. According to respondents, a good facilitator also helped participants navigate tricky technological glitches.

"Excellent personal learning results (felt like I was learning); however, the quality of the learning experience depends so much on the qualities and abilities of the facilitator."

—(Survey respondent)

Mixed Results: 6 Responses (counted separately)

As much as the internal team tried to keep the positive and negative responses separate, there are several instances where they are joined. For example:

"I like using the Internet to research topics; however, I can often get frustrated when I get stuck."

—(Survey respondent from community-based program)

"I generally find the conferences, etc. very useful, though sometimes the amount of participation is limited."

—(Survey respondent from college program)

"College courses that are done on-line are great for areas such as ours that do not have a College in town but it is harder to receive support and explanations of things that are not understood."

—(Survey respondent from community-based organization)

"Good to be able to set own times … But discussion online is not very satisfactory—a lot of misunderstandings occur when it's not face-to-face."

—(Survey respondent from community-based organization)

"Good. Well received. Still new, working out glitches. Difficult to market to very remote areas. Getting curriculum to put online takes time and money …"

—(Survey respondent from school district program)

"It is good because it is convenient. I do miss the interaction with the classmates."

—(Survey respondent from community-based organization)

Each of these quotations illustrates a benefit or a positive result achieved from online technology and learning opportunities. Respondents also wrote about frustration with technology, how low participation impacted the quality of the learning experience, the effect of not having technological support and explanations when needed, the quality of online discussions and potential for misunderstanding, technical glitches, the high cost of developing online curriculum, and finally, missing a quality of interaction with classmates. Dealing with technology was the most significant factor in terms of having a positive benefit.

Turning a (potentially) Bad Result into a Good One

Respondents reported positive, negative, and mixed results. There were also some notable instances where respondents turned a potentially bad result into a positive one. From these responses, the thinking behind the strategies being used to make sense of this new mode of learning emerges.

"In one case I found it a very helpful and effective way to learn new skills. Partially because we formed a local study group who met to support one another and work on things together. In other regions where people were on their own they dropped out. I think this is partially because they need more individual, personal, support than they could get through distance learning."

—(Survey respondent from community-based program hosted by community college)

This mode of learning is new for many people and cultures. For example, one respondent reported that, at the time of this research, the First Nations communities in Ontario were working with online technology to develop best practices within their field. They were developing and learning about these best practices through online technology of the synchronous *Saba Centra Suite* Symposium platform. The facilitators involved learned how to make online learning work for the First Nations' communities by integrating aspects of Aboriginal learning into the online sessions. For example, the opening ceremony is a critical aspect of grounding people and focussing their efforts, and facilitators have found a way to incorporate it into the learning.

"… We learned that some of the material we tried to present online is not conducive to the virtual classroom. The cultural component loses something in the translation, but we do our best to incorporate it. Our most recent effort has been to give a traditional opening its own session, that way it isn't buried in the academia of the presentation. We 'step out' to enjoy the opening and to get grounded, then rejoin the session as we might do if we were meeting face-to-face. (We do ceremony outdoors if at all possible, and then come in for the paperwork part.)"

— (Survey respondent from community-based program)

A final interesting example of a bad result turning into a good one was the mandatory learning versus voluntary learning factor in getting good learning results.

"When the training was optional, I found great resistance to participation, with many practitioners saying 'I can't work/learn this way, I need face-to-face' — in spite of the fact that face-to-face wasn't possible. When online participation was a requirement in a credit-bearing course the discussion was very rich and participants made good connections with each other."

— (Survey respondent from a college program)

This respondent explained that when pushed, this group of people — who originally resisted online learning — rose to the challenge and made it work for them.

Negative results: 35 responses

For respondents, negative results of online learning tended to cluster around frustrations with technology in general and the learning mode in particular. It is important to note that there are regional disparities with some provinces having distance learning infrastructure developed ahead of other provinces.

Negative results from technology, identified by 16 respondents (45%) fall into these categories:

► Technical glitches

► The challenge of getting people online and used to the technology

► Not having sufficient hardware/software to do the task

Technical glitches

While people in the literacy field may not be new to computers, they are often in the developing skills stage in terms of using the technology for learning. Seven respondents (20%) noted that while they were comfortable using the computer, they did not know what to do when something went wrong. Links that do not work, sound that does not come through, screens that freeze, or software that cannot be downloaded are just some of the technical glitches that frustrated respondents. Some respondents were able to get around these glitches, obtain technical support, or even figure them out for themselves; however, they report that many other users became discouraged and disenchanted with technology. They simply lacked the technical experience needed to navigate glitches and find creative solutions to their problems.

Challenge in getting people online and used to the technology

It is evident that many respondents see the benefits of online learning and engagement with technology. Yet five respondents (14%) mentioned that they and those around them did not possess sufficient computer skills to benefit from what is available. The level of difficulty they had and the frustration they experienced was linked to the degree of technical expertise they had. In spite of being able to identify that lack of knowledge as a reason for frustration that the necessary time and support to build those skills did not exist for these respondents.

"I would say within my work practice, the negative results I have seen with practitioners facing the prospect of introducing computer-based learning and online and distance methods and tools in their practice has been due to the overwhelming lack of the needed time to learn the methods and explore the resources and then reflect on and try out ways to integrate these new things into practice. Online and distance possibilities remain as that, possibilities. Expectations of integrating online and distance then can feel oppressive and burdensome and generate frustration and negative responses to even trying. Or trying once and experiencing an obstacle can turn someone off for a long time."

—(Survey respondent from a community-based program)

Not having sufficient hardware/software to do the task

In addition to technical glitches, four respondents (11%) also mentioned that not having the hardware or software needed to participate created a negative experience. For example, it was noted that having a dial-up instead of a high speed Internet connection limited their ability to participate in online learning opportunities. Speed of connection is not always a hindrance to accessing online programs; however, a dial-up connection ties up a phone line; takes longer to upload and download materials; and makes viewing "live streaming" (e.g., YouTube-type clips) a frustrating experience.

"Not all literacy learners or practitioners have access to the high speed Internet connections and kinds of plug-ins required to make the best use of online and distance learning which can have negative impacts when people feel they are being left behind or disadvantaged."

—(Survey respondent from a community-based organization)

The learning mode in particular was the focus of many negative results

Nineteen respondents (54%) noted quite clearly and frankly that they simply did not like to learn in this manner. They experienced negative results because this kind of learning did not suit their learning styles and needs. In other instances, negative results arose because the learning did not fit the group's needs, or because participants felt a sense of isolation and dislocation from the learning community. These responses can be categorized as:

▶ Learning styles not being addressed

▶ Social and group dynamic aspects of learning are not being met

Learning styles not being addressed

Fifteen respondents (43%) provided a number of negative responses that are attributable to learning style or learning preferences. For example:

"I have tried taking a written course online a couple of times, but cannot focus on it. Need a live instructor."
—(Survey respondent from a community-based organization)

"The IC3 training online didn't work well for me, as I am very hands-on and found I could tune out too easily. I also didn't feel any sort of connection with the instructor and didn't want to hold up the group by asking questions."
— (Survey respondent from a community-based organization)

"We've had bad results in training as most of us don't seem to learn well with online training."
— (Survey respondent from a community-based organization)

Respondents who expressed these kinds of negative results have clear learning styles that they feel were not being addressed in the online learning they were enrolled in. Some respondents reported feeling a lack of connection and that they needed the energy and "spark" of a live instructor to help them keep their focus. As well, while many respondents liked the asynchronous aspect of online learning, some expressed that the time between posting and reading the response created *"a barrier to outgoing communication."*

Online learning tends to be highly text driven and often requires participants to write their responses. A respondent noted that she *"was*

hesitant to type down [her] thoughts and ideas." Finally, because of the requirement to read and to respond by posting text, some respondents felt that it made it difficult for the more quiet and reflective learners.

"It's not OK to be quiet—everyone feels compelled to reply to questions posed by instructors because you have to show that you're someone 'there' or paying attention. This creates a lot of messages in discussion groups that may not be very value added."
—(Survey respondent from community-based network)

Social and group dynamic aspect of learning is not being met

The social aspect of learning was important to four respondents (11%). They judged the quality of the learning experience by the connections they made and the new knowledge gained. Online learning was seen by some as isolating and they compared it less favourably to face-to-face learning. Two respondents mentioned that the nature of communication, i.e., print, could possibly lead to miscommunication and problems in developing relationships, or mixed messages. A few respondents mentioned discomfort with posting comments, whether this is due to insecurity about their writing abilities, or not wanting to commit their ideas to text in a public venue, is not clear. What is clear is respondents had not yet found a way to engage in the learning activity in as full a manner as they would if they had been in a face-to-face session.

While many respondents mentioned networking and connecting with many people as a positive result, there are others who had not found a way to make online personal connections work for them. Thus they expressed online learning as *"missing [a] sense of community."*

Evaluation of online and distance learning

Online and distance learning activities have been evaluated in a number of formal and informal ways throughout the Canadian literacy community. However, the respondents did not conduct the evaluations and therefore did not have access to the results. Of the 80 survey responses, only 13 (16%) responded to the evaluation part of the question.

Formal evaluation:

The formal evaluation methods respondents listed were primarily data gathered from surveys. In one instance, these surveys were filled out anonymously online at the end of every online workshop. Respondents also mentioned participation levels, course evaluations, and documented observation by the facilitator. Other respondents from the literacy community noted that they had used the built in evaluation survey available from platforms such as *Moodle* or *WebCT* to assess learner satisfaction.

Informal evaluation:

According to respondents, for the most part, the evaluation of online learning in the literacy community is done by informal methods. This does not make them less significant. Many respondents reported receiving feedback—both solicited and unsolicited—from participants at varying times throughout their courses or activities.

"With my own learning, I self-assess for 'good outcomes' such as skill improvement (being able to do more online or with a computer) or increased knowledge."

—(Survey respondent from a community-based program and provincial government funded program)

No evaluation

In a few instances, participation and engagement was so new that these respondents had not yet determined ways to evaluate the effectiveness of their courses.

"We have just begun to use the online course for our instructors and have not yet had time to form an opinion as to the effectiveness of the course."

—(Survey respondent from community-based program)

Conclusion

Question Three was intended to discover what results have been obtained from online learning methods and how these results have been assessed by members of the Canadian literacy field.

In survey responses and in interviews, respondents reported positive benefits of online learning:

- an increased access to professional development opportunities and knowledge, regardless of geographical barriers and scheduling conflicts
- the ability to meet practitioners needs
- the flexibility for users to work at their own pace
- access to relevant materials
- an increased ability to save time and money on training, professional development and acquisition of knowledge, especially around travel and accommodation costs
- improved skills and knowledge and increased networking opportunities.

Respondents also reported negative results, which include:

- technical glitches
- frustrations getting people online and used to technology
- not having sufficient technical equipment to do the task
- learning styles not being addressed
- social and group dynamic aspect of learning not being satisfied.

It is difficult to determine from the surveys if those reporting such negative results were participants or facilitators, or both.

Online methods have been evaluated both formally and informally by service providers, organizations, and practitioners. In a few instances, because the learning mode was too new, evaluations had not been completed. Formal evaluations tended to be structured as online surveys and informal evaluation methods tended to be on-going requests for feedback from participants.

SURVEY: Question Four

Question Four of the Getting Online research with Canadian literacy practitioners was:

> *In what ways do online or distance training or support methods produce different results from face-to-face learning?*

> *"Being online is different you can't see facial expressions, body language, get the feel of the class, but it is one of the most efficient ways to learn."*
>
> —(Survey respondent from a community-based program)

The surveys and the interviews yielded a lot of data from this question. Seventy-seven responses were extracted from a possible 84 surveys, and all 26 respondents provided answers to this question during interviews.

In several instances, respondents were clear that while they noted differences between online and face-to-face learning, they had no expressed preference. They had found ways for the different modes of training to serve different training needs. For example,

> *"I'm not sure if the final results are different. I'd like to say they are, but ... really, in the end I either have the information I need or I don't. Again, either I use it or I don't. Often the face-to-face training that we participate in does not directly pertain to our current workload; while the independent online training does. Even the on-line courses I've taken have been ones that provided learning on topics that our program needed. When considering participating in an on-line course, I choose only those that apply to our current activities. When considering a face-to-face course, I include the unplanned learning that happens from actually interacting with my peers both during the course, during coffee breaks, and during free time after the course."*
>
> —(Survey respondent from a community-based program)

The internal team asked specifically about the differences between on-line or distance learning and face-to-face learning. Respondents tended

to focus on either the positive aspect of one, for example face-to-face learning, or the negative aspects of online methods. In only one instance a respondent gave a list of things that were "bad" about online learning and another list of things that were "good" about online learning—all the while comparing it to face-to-face learning.

In 11 instances, survey respondents preferred face-to-face learning over distance methods, yet provided much commentary about the benefits of online learning. Some spoke more strongly about their preference than others. Despite a preference one way or another, many found that online learning provided more training opportunities, more time for reflection, and more convenience.

"I like the online training as it offers a chance to participate without having to travel and giving up a day at the office. It (Saba Centra Suite) still offers interaction among participants. However, nothing beats a face-to-face training session where you can see the participants and chat with them."
—(Survey respondent from a community-based program)

"Distance training can be more reflective because [people] can do it when they have time to sit and consider it. The problem is dedicating a fixed time to this. Face-to-face provides faster satisfaction because the relationship is built immediately (positive or negative). Face-to-face is more immediate in that you are there and learning. Distance seems to take more time, but this is not a bad thing—just a difference I have noted."
—(Survey respondent from a community-based organization)

In the interviews, respondents described 11 instances where online learning modes compared more favourably than face-to-face learning, and eight instances where online compared less favourably than face-to-face methods.

The survey data illustrates a larger complexity of responses. Some respondents gave more favourable responses about online learning in terms of direct comparisons; in the same manner, other respondents gave more favourable responses about face-to-face learning. When comparing online learning methods to face-to-face, many only wrote about what they liked about one of the methods.

Six survey respondents expressed a clear preference for face-to-face learning. Another five survey respondents noted that online learning "has great potential," is "a good alternative," or "a close second [to face-to-face learning]," but for these respondents, it is clearly a substitute, not a first choice for professional development and training.

Another eight survey respondents claimed there is no difference between the modes of learning. What makes the difference are the needs of the learner and the material being learned, and that with experienced online facilitators, the same results can be obtained.

Synchronous and Asynchronous Learning

It is interesting to note that when respondents wrote or spoke about online learning, they were often talking about two different kinds of experiences: synchronous and asynchronous online learning. According to the surveys and interviews, there are more asynchronous online learning opportunities available to literacy practitioners than synchronous ones, but there are increasing opportunities for practitioners, particularly those in Ontario, to participate in these "in-the-moment" online events.

Therefore, the perceived differences between online and face-to-face learning modes was often dependent on people's preference for working, thinking, and responding in the moment, i.e., the way participants do in face-to-face learning and in synchronous learning, compared to asynchronous learning, in which participants have the time and opportunity to reflect, compose thoughts in writing, and respond whenever they feel ready. In some instances, respondents to this question expressed a positive aspect of online learning when it was synchronous, but then gave a negative aspect of it when it was asynchronous, and even vice versa.

Our overall assessment of all the responses leads us to conclude that there is a general acceptance of, if not acquiescence to, the presence of online learning methods and tools. Respondents noted the numerous and rich benefits to be obtained from online learning methods, yet were not ready to let go of, or give up on, the benefits that have been obtained from face-to-face interactions.

Positive Results: 54 Responses

Saves time and money on travel and time away from work

Nine respondents (17%) reported as a positive difference the amount of time and money saved by being able to engage in online learning methods. This is also referred to as *"opportunity cost"* by other disciplines. For these nine respondents, saving time and money was critical, even when confronted with the reality of a preference for face-to-face methods. The following quotations from respondents demonstrate this:

> *"I still prefer face-to-face if it's possible, but the fact is that online or distance is often more feasible. I've taken online professional development courses so that I don't have to travel as much, and while I've found these more time consuming and less effective for my learning style, I've been happy to save myself the cost and effort of travelling."*
>
> — (Survey respondent from a college program)

> *"Face-to-face is always preferable but online is a good alternative when cost and time are a factor."*
>
> —(Survey respondent from a community-based program)

Allows participants to work at their own pace

In listing the positive benefits of asynchronous online methods, being able to work at one's own pace was critical. Many of the respondents were full-time literacy practitioners, so being able to weave a learning opportunity into a busy schedule was a positive feature. Eight respondents (15%) noted that being able to work at their own pace allowed them to take advantage of open spaces in their schedules and also to take as much or as little from the learning as needed. The word "convenient" appeared six times in respondents' comments.

Increases opportunities to learn new skills and gain information

Eight respondents (15%) noted that one of the benefits of online learning methods was an increase in the number of training and learning opportunities available to busy literacy practitioners. This was due to the number, variety, and convenience of the opportunities available. Instead of having to wait for a face-to-face training to be organized, hoping that the topic was relevant, and then trying to fit it into a busy schedule, many respondents noted the benefit of being able to sign up, join in, and learn what was needed, when it was needed.

Online methods allow for more reflection due to reading and writing responses

Four respondents (7%) noted that a different kind of thinking was needed in online learning due to the requirement to read and write responses. For them, this was beneficial, as it pushed them to think at deeper, more thoughtful levels. Some respondents referred to this as "allowing for more reflection."

Respondents noted the perception that with online learning methods, participants cannot simply sit back and be listeners at the rear of the class, drifting off into another space. It was mentioned several times that the act of having to write and post responses demanded a level of engagement that is often not found in face-to-face training.

"You think about things differently when you post on line, you are more reflective, have the chance to read others stuff. [It's] better for people who don't think out loud and need more time to pull their thoughts together. Some like the online stuff better because that's the way they think and the online venue gives them the space to organize their thoughts."

—(Interview respondent from a community-based organization)

More in depth study

In building upon this notion that online learning methods afforded more reflection, it was believed that it also lead to a "richness of discussion" that one respondent claimed was rarely seen in face-to-face settings. Another respondent felt that the format for presenting materials, downloading documents, and linking participants to websites allowed for more in-depth study of a subject. Furthermore, respondents noted that because participants have to post their responses, the facilitator can gain an accurate sense of how people understand the ideas being discussed. For respondents, the mandatory written aspect of many online methods was the element that contributed to the view that online methods afforded more in-depth exploration and examination of a topic.

Conversely, one respondent felt that face-to-face learning afforded more in-depth study of a topic.

Face-to-face affords a greater variety of learning activities

For two respondents, online learning was limiting because it primarily consisted of reading and writing. While it did afford more in-depth study

and more opportunities for reflection, it did not engage learners in the wide variety of ways that often happen in workshops and other face-to-face gatherings.

"On-line people who sign up for non-credit participation do not expect to do more work than reading postings, more or less thoroughly. When you get people face-to-face, you can give a certain amount of input, and then ask them to do some activities or discuss the input, but on-line the input has to be put into very short pieces, with people asked to respond."

—(Survey respondent from a college program)

According to respondents' comments, they felt that for people who have wider learning needs (i.e., auditory learners needing discussion, kinaesthetic learners needing movement, and visual learners needing graphics), the reading aspect of online methods was limiting and they could not engage with or absorb the information. One respondent noted that as a visual learner, she "read people's faces and body language as much as their words." For another respondent:

"The ability to compose and post is a critical aspect of being able to participate in online learning. It's hard to do a variety of other activities online other than reading and posting."

—(Interview respondent from a community-based program)

Negative Results: 76 Responses

The negative results or differences noted tend to cluster around the quality of learning and engagement that one obtains from face-to-face interaction compared to the more individual online methods being used by the respondents.

Online learning is isolating and non-sociable

An important aspect of face-to-face professional development is not the content being covered, but the opportunity to network and share ideas, practices, and experiences. It is no surprise, therefore, that in 17 responses (22%) reported as a negative result, respondents negatively criticized online learning methods as being isolating and non-sociable.

"I like online training but sometimes find the lack of people contact allows my mind to wander."

—(Survey respondent from a community-based organization)

The need for a community of learners is what leads to the *"sparky [sic] inspiring exchange of ideas"* that is presented in the next section. It is also what keeps people energized and motivated. Online, described by some respondents as flat, has not worked for people who need the stimulation of reading body language, hearing voices, and being in a community of practice. One respondent noted that online learning was like learning in a vacuum, because participants do not receive immediate feedback from peers about the topic being learned and ideas shared. Five respondents mentioned the lack of body language as a downfall of online learning methods.

Online modes of learning lack the inspiration and energy that comes from face-to-face interaction

> **"No sense of depth and spirit with online. Online is isolating and non-sociable. Not the same kind of inspiration & energy one gets from face-to-face. I prefer personal contact, online/distance is a substitute and not a first choice."**
> —(Survey respondent from community-based program)

One respondent described some online platforms as flat and face-to-face exchanges as "sparky." This is an effective example of the kind of language respondents used when comparing face-to-face learning with online learning. They mentioned that energy and enthusiasm for the topic can be felt when many people gather. In nine instances (12%), respondents commented on the dynamic interactions and spontaneous conversations that happen in face-to-face gatherings.

> **"Nothing beats face-to-face for a sparky, inspiring exchange of ideas — it is hard to replicate that instantaneous exchange-creation loop that literacy workers do when they get together."**
> —(Interviewee's survey response from a community-based organization)

Respondents noted that the spontaneity that occurs in face-to-face learning is often not present in online learning. When people talk and share ideas, they are quick conversations that leave no record. For some respondents, it seemed that the written aspect of online learning made many people concerned about seeming unclear, not well thought out, or just plain "wacky." Because of that, the flow of ideas or the discussions were many times reported as lacking in spontaneity, stiff, and formal. However, one respondent noted that the dynamic exchange loved in face-to-face can happen online as well, saying:

"… but it takes longer for people to feel comfortable to send quick, funny messages without worrying about making sense or looking 'silly'."

—(Survey respondent from community college)

It is important to note that these respondents appear to be only commenting on text-based, asynchronous learning, and not synchronous platforms that are quite visual and aural.

Less discussion and "outside" learning takes place in online learning than in face-to-face learning

In seven instances (9%), respondents noted that while they value online learning, they feel they do not learn as much as they would if they had been in a face-to-face setting. This is a common finding, but tests of learning consistently show that there is no difference. This finding is so consistent that a *"No significant difference"* website (see http://www. nosignificantdifference.org/) was created, and books have been written on the topic. So, while participants may believe they learn less in online environments, research indicates they really do not. What is predictable is that participants like the distance experience less well; most people prefer the social experience of the classroom—even though they do not learn any more material there.

This research is supported by the observation that a great deal of learning happens despite or because of the curriculum or lesson plan. In online settings, some respondents felt that they were losing something because they did not have the opportunity to interact with other participants outside of the learning. Posed as a question, one respondent's thoughts illustrate this view.

"What do people lose in online? It relies on words and we learn in many more ways than that. The learning that happens through absorption, the connections that you have with people, the chance to go for coffee."

—(Interview respondent from a community-based program)

Furthermore, many respondents felt that in online learning sessions, people tended to respond directly to the question and did not veer too far off the topic. Four respondents noted that there was much more discussion in face-to-face than in online learning. They noted that participants tended to post one or two comments, and felt that if those

same participants were face-to-face, there may very well have been a lively exchange containing many ideas. One respondent noted that online communication is more "one-way" than face-to-face.

Misunderstandings occur online

Mentioned six times (8%) was the fact that when people have to rely on text to communicate, miscommunications can occur. A phrase spoken with a particular tone can carry a much different message than the same phrase in print. Respondents noted that miscommunication was a problem, but in one case, the negative experiences were exacerbated by the fact that it took many messages to sort it out. Miscommunications are common in any interactions, but for some respondents, in real time exchanges, they can be cleared up quickly.

It was also noted by other respondents that miscommunication can be prevented by having a face-to-face meeting prior to the online learning. When people know each other and have a sense of community or at least a group dynamic, there is a comfort level that alleviates problems.

It takes too long to receive feedback in online learning

For respondents who benefit from the "sparky" exchanges and the dynamic interactions of face-to-face learning, they found the lag between posting a message and receiving feedback on the thought was a problem. For them, often the energy around the thought was gone by the time someone else picked up the thread. Five respondents (7%) reported that even though they may have started the conversation, their thoughts were on other content by the time they received feedback and commentary from other participants and facilitators.

"... somehow the lag time presents a barrier to outgoing 'communication' for me."
— (Survey respondent from a community-based organization and school district)

However, one of the respondents did note that while it took longer to receive feedback from online participants than was the case in her experience with face-to-face learning, the quality of the feedback was better, because it was written out and concrete.

Visual/emotional learners struggle with online learning

Three respondents (4%) commented on the fact that as visual learners and as learners who need emotional connections when they learn, they struggle with online learning.

"The emotional connection is not visible. The ideas are written, but if you are a visual or emotional learner, it does not spark your imagination as well as face-to-face."

—(Survey respondent from a community-based program)

Visual learners often rely on faces and body language as much as they rely on words to understand what is being said. Without these cues, they have difficulty making the emotional connection needed for their engagement with the group and content.

For two respondents (3%), face-to-face meetings prior to going online as a learning group assisted in their ability to participate in and benefit from the learning mode.

"In the [...] course, we met as a group before going online and this provided a much more trusting atmosphere and what felt like an amazingly free level of communication. Emotions were important in that course, and the face-to-face meeting gave me the freedom to be frank about difficulty with materials and the emotions that came with them."

—(Survey respondent from a community college)

It is important to note that having an emotional connection with others in the class or cohort is a critical piece for many learners. Without that connection, they feel isolated, not heard, and unsure of what they are part of.

"I find [online classes] very different. Face-to-face provides a level of comfort and a building of confidence as a collective that online hasn't given me. Without the personal connection of seeing the visual clues, etc., I find it harder to make connection with others."

—(Survey respondent from a community-based organization)

Participants pay less attention online than in face-to-face learning

Despite the view expressed by several respondents that online learning allows for more in-depth study, there was also an opposing viewpoint. Four respondents (5%) expressed their belief that people who participate in face-to-face learning are more focused on the activity. They felt that people who engage in online learning can get away with skimming through the material posted and other behaviours. This is illustrated in the quotation presented below.

"Participants on-line largely pay less attention, or more sporadic attention than face-to-face participants, who usually have set aside a certain time (an hour or a day, for example) to concentrate on the topic."

—(Survey respondent from a community college)

Respondents reported a belief that because face-to-face learning involves being physically present and being seen by other participants and the instructors, learners are more engaged with the activity at hand. It was also mentioned by two respondents that people tend to take learning less seriously when it is online.

Online learning requires greater commitment

Finally, three respondents (4%) noted that a great deal of motivation and time was needed to benefit from online learning, more so than what they felt was needed for classroom learning. For one respondent, online modes were ways of learning that had their advantages, but they also come at a cost. Three respondents noted that online learners have to have a greater commitment to independent learning and personal motivation to get through.

Differences Noted: No Clear Winner

Faster learning

Two respondents (3%) expressed an important difference in online methods was that the learning was faster. They said they could get online, do their work, and be done with it. In contrast, two other respondents felt that face-to-face methods were faster and more efficient. For them, they simply attended the course, did the learning there, and it was done.

Several respondents' comments reflected both positive and negative aspects of online learning. While respondents did not want face-to-face learning opportunities to disappear, and clearly and articulately explained why online modes are better ways to learn, they are also specific that online learning modes have a great deal to offer the literacy practitioner community.

"Yes, [there are differences] in terms of communication and in terms of depth of discussion. It's easier to misinterpret emails than it is to misinterpret what someone says face-to-face. It's also easier for people to be flip or to respond 'on the fly' which they probably

wouldn't do if they were in a classroom. It's likely that some people take greater advantage of online opportunities—that is, they engage more in PD when it's offered online. In my case, this is true. I would not take the time to do a course that had a specific night of the week when I had to show up. I LOVE being able to work on something according to my own schedule."
—(Survey respondent from a community-based organization)

Despite the perceived limitations of online learning, the risk of miscommunication, and frustrations with technology, the advantage of being able to do something on one's own schedule at one's own pace was a more powerful lure for some respondents. This sentiment was clearly articulated by eight respondents (11%), and hinted at by several others.

Several respondents were optimistic, noting that as technologies and people's skills and comfort level with them improve, the quality of learning online has also improved.

"It comes down to learning style preferences I think. The best methods will likely always weigh in favour of a realistic blend of online, distance, and face-to-face."
—(Survey respondent from a community-based program)

From these eight responses, it is clear that for respondents, one mode of learning was not necessarily better than the other. It depended upon the needs of the learner and the material being learned. It was an issue of learning styles and preferences and how people and facilitators made the learning work.

Also noteworthy are seven comments (9%) that in online learning and in face-to-face learning, what is key, and what makes the most difference in online learning is the quality of facilitation, not the mode of learning.

Conclusion

Question Four was intended to discover the differences members of the Canadian literacy community had experienced between online learning methods and face-to-face methods. The positive results focused on increased learning opportunities, saving time and money, the view that online methods allowed for more reflection and in-depth study, and had the advantage of learners being able to work at their own pace. The negative results or differences noted by respondents to the survey and

interviews tend to cluster around the quality of learning and engagement that one obtains from face-to-face learning compared to the more individual online methods being used by the respondents.

One respondent demonstrated a clear understanding of how online learning can be used, the negative aspects minimized, and the positive aspects exploited, all the while mindful of the need for learning styles, needs, modes, and content to be considered.

"Online and distance done well should be able to provide trainees or practitioners with a broader menu of learning resources and ways of learning to choose from and combine in the order and way that matches best their learning preference for what they are learning.

Online and distance have a greater capacity than face-to-face to give anytime, anywhere access to resources, answers to questions, learning environment need for quiet space, uninterrupted time, alertness, etc. Online and distance offers more choice for learners than face-to-face can. When choice can allow for the development of the best possible learning circumstances, I would argue that overall better learning can happen.

On the other hand however, people who prefer to learn by talking with others, depend on body language cues, don't write or spell well so are limited in their typed expression, will likely find online learning limiting and not as fulfilling and therefore may not learn as effectively. Technologies such as Skype, Saba Centra Suite Symposium, teleconferencing, and video conferencing, webcams can all be implemented to offer a closer to face-to-face experience online or from a distance, but I would guess that for this type of learning preference, actual face-to-face in one room at one time could produce greater learning results. As well for the learner who prefers to interact in role plays, etc. to learn and retain knowledge, face-to-face would be preferred and be most effective."

— (Survey respondent from a community-based organization)

SURVEY: Question Five

Question Five of the Getting Online research with Canadian literacy practitioners was:

How were the training methods introduced?

The following information is based upon the responses the internal team received from each of the 26 interviews and 65 of the 84 surveys. All interviewees had something to say about ways the online training they were engaged with was introduced. This is not surprising as they were interviewed because of their direct involvement and experience with the delivery of online learning.

Responses came from two vantage points: the view of participants in how training was introduced for them and what they recalled of that experience, and from the view of deliverers in how they organized the introduction and what they recalled.

From Question One, the internal team learned that 32% of the survey respondents had participated in online training activities, so the responses to this question are not just about the introduction to the online training they were engaged with, but it seems to be also about the larger concept of online training in general.

Nineteen of the total possible 84 survey respondents did not respond to this question. In addition, two respondents indicated they could not remember how the online training was introduced and one other doubted her memory.

Those who did reply to this question answered in terms of how the particular session or the online learning they were involved with was introduced to the participants. According to respondents, some facilitators went to great lengths to ease participants into the learning environment, helping participants get used to the idea of online training and the technology as well.

"We phased the online training in. First we provided all school board programs in Ontario with 6 modules of training on CD-ROM. The next year, we put the training online and offered free training workshops on

the website to groups of practitioners. We delivered 12 workshops in various areas of the province. We offered to do workshops at regional conferences—and did 4. We sent monthly excerpts on hot topics with information and practical ideas to all school board managers so they could simply pass them along via email to practitioners or use them in their monthly in-service meetings. We distributed updated cards and flyers at annual conferences. The key is continuous promotion. As soon as the promotion stops, activity slows."

—(Survey respondent from community-based organization)

However, four respondents answered in a more general sense, replying in terms of how the concept of online training was introduced to their organization.

"Our staff jumps at the chance of further training since we are a small organization—we've had no issues with introducing training."

—(Survey respondent from community-based organization)

Respondents did not note anything remarkable in terms of how the general concept of online learning was introduced.

Introduction to Training Methods

As part of the data collection, the internal team wished to learn how the feature of training via online learning was introduced to respondents. The questions were designed to probe how participants learned the technology, what was required of them, and how they learned the software on the online delivery platform. From all the responses, the internal team was able to use 21 responses.

Print Instructions delivered via email or surface mail

Twelve participants (57%) reported that they received print instructions via email or through surface mail. They said they read through them, figured it out, and proceeded with the online learning. In some instances, this form of introduction was accompanied by a phone number whereby they could reach a technical support person. In all but one instance, the introduction process went smoothly.

"Information was sent by email, with clearly written instructions on how to register, followed by instructions on how to set up the program, and how to log-in for the session on the day of delivery. Everything went just as outlined."

—(Survey respondent)

Online tutorials

Five respondents (24%) reported they either attended an online tutorial or made reference to the presence of one. In these cases, an online tutorial referred to an online learning session separate from the course or training, about how to use the software, such as *WebCT, Moodle,* or *Web KF.* Some colleges offer this course as an introduction to the technology, which is optional in some instances. While this option is available for all participants, it seems to be to be accessed on an as-needed basis and participation is often not mandatory.

> *"Every college offers a tutorial; however, no one actually completes them. Every time I take an online course at least 4 people wind up in a panic over the technology, some of which drop out. Our college also offers a workshop prior to the beginning of a semester to introduce the platforms."*
> —(Survey respondent from a college program)

Introduction to online learning built into the course

For four respondents (19%), the "introduction to online learning" was a feature built into the course. In these cases, the first few sessions or lessons were related to using the technology and making sure everyone was ready to learn online, as opposed to being directed at the course content.

> *"Courses usually start with a 'how to use the technology' section. Either on paper or online, participants are invited to introduce themselves, both as a way to get to know each other and to test the technology, and there is phone or online support for those who need it."*
> —(Survey respondent from college and community-based programs)

For example, many online conferences offered by the Hub started with a weeklong "welcome" or "getting to know you" portion. The intention behind this was to ensure that everyone was able to connect and use the technology before the course, or conversation began. In the first week of the Writing Out Loud training course, the only assignment for participants was to post their biography and upload a photograph of themselves.

For the most part, respondents noted that the introductions went well. However, there were a few references to technical difficulties, related to "glitches."

"[I] have not had an experience yet that went smoothly … always glitches and often last minute roadblocks."

— (Survey respondent from community-based program)

Respondents also reported that, despite the best of plans, some participants simply could not align the learning and the technology needed to make best use of the session. Organizers who were quite experienced with this issue often went to great lengths to ensure participants were aware of what technology, in terms of hardware and software, was needed before the session started. Organizers and facilitators also developed checklists so participants would have to read and manually reply to this requirement. However, as one respondent noted:

"If I had a dollar for every participant who indicated to us that they did in fact have all of the required equipment only to receive a panic call on the day of the online event telling us—whoops, I don't have a headset, and I don't have high speed, I forgot to get set-up ahead of time, etc. etc.; well, I'd be RICH."

—(Survey respondent from community-based organization)

As noted above, respondents described how, in some instances, trainers developed ways to ensure that participants were comfortable with the technology and ready to participate. This meant communicating with potential participants about what was needed in terms of hardware and software. Respondents said it was not easy to have these conversations with people who had limited experience with the technology. They noted that participants did state they had the necessary technology in place, only to discover on the day of course delivery that in some instances, they were wrong. In an attempt to resolve this situation, respondents described how some trainers took the initiative and developed online practice sessions designed for participants to test their technology and computer skills prior to the learning event.

"As practitioners ourselves, we have a great knowledge and empathy for the needs and barriers of practitioners. As well, we had both participated in POOR online training so we knew what we wanted to avoid. A high level of preparation and holding several practices sessions ahead of time to iron out glitches really helped. We also did a lot of pre-tech support for participants to reduce barriers for them."

— (Survey respondent from a community-based organization)

Conclusion

Question Five was intended to reveal how training methods were introduced to members of the Canadian literacy community. For the most part, it appears that the organizations and practitioners have tried several ways to ease people into online learning. Some methods were more passive than others were, yet all seem to have the direct intention of exposing participants to the technology and communicating ahead of time what was required in terms of hardware and software. The problems or negative pieces of the introductions seem to be in the realm of "technical glitches," which respondents did not identify or describe in any detail.

SURVEY: Question Six

Question Six of the Getting Online research with Canadian literacy practitioners was:

" *What do you see for the future of online learning in the Canadian literacy community?* "

"If we can arrive at a way for people to have equal access to practitioner training, then we can get somewhere. The use of technology could assist in achieving this goal."
—(Interview respondent from not-for-profit organization)

Responses to Question Six came from 14 interviews and 69 surveys for a total of 83 responses; 78 were relevant to the question. Twelve survey respondents did not answer this question. For the most part, respondents recognized that there was a great deal of potential in online learning. They noted that, in many instances, those offering, delivering, and developing online courses and learning opportunities have either not determined or agreed on how to maximize the benefits of online learning, yet in general there was the sense that there is the will and even the enthusiasm to find a way to make it work.

Many respondents did not want to eliminate face-to-face meetings as a form of training, but they realized the savings in time and travel are benefits that cannot be ignored. While face-to-face encounters may be highly effective ways to network, share knowledge, and learn new skills, as people begin to get comfortable with the technology, and as online methods improve, respondents agreed that the benefits of online learning were beginning to outweigh its negative aspects. The following is an analysis of the responses based upon frequency, highest to lowest.

Learning in smaller and remote communities

In looking to the future of online learning, 21 respondents (27%) mentioned the value of using online methods in smaller and/or remote communities. For some, the challenge was to gather a large enough class to be able to offer a course. For others, it was the barrier of the cost of time and travel to bring people together. Having information available online on an ongoing basis is a vision for some small communities.

"I think in small communities there is a wonderful opportunity to use online learning in conjunction with other methods of training and instruction. Sometimes if a small cohort is available to train for something, it doesn't justify traditional classroom-based learning but there would be a role for distance learning."

—(Survey respondent from a community college program)

More training and capacity building

At the heart of it, respondents were optimistic about online learning methods. As noted from previous questions, practitioners were using technology in a multiplicity of ways to improve their practice. Many see the value of using computer technology to improve skills and knowledge in the literacy field. In some cases, respondents noted that online learning option was "another tool in the tool box."

"I see lots of potential! I would not want it to replace face-to-face, but it would be a welcome addition to what we have. Practitioners are generally working part time and have children at home; to be able to train is a luxury. To do it at home would be a great add-on."

— (Interview respondent from a community-based organization)

Eighteen respondents (23%) noted that while they have taken advantage of online methods and have benefited from this mode of learning, they felt strongly that additional training and capacity building was needed in order to move the notion forward. They observed how facilitators were often expected to produce materials and deliver online programs and courses—without the training in how to do this. Those respondents who had participated in online courses noted that online facilitation and delivery was vastly different from face-to-face sessions. Respondents acknowledged that it is not as simple as taking the classroom materials and making them available online. If this does happen, respondents felt the course had become just a high-tech correspondence course as opposed to a potentially dynamic online one.

There is also the view that literacy practitioners need to become well-experienced with online learning methods and techniques before this medium can be utilized to its fullest potential.

"So much centers around relationships in this field and research continues to highlight the effectiveness of face-to-face, that my sense is online will mostly be secondary … until individual practitioners are well experienced with online."

— Survey Respondent from a community college program

Some respondents believed practitioners in the Canadian literacy field had not yet learned enough about online technology. For this respondent, practitioners had barely scratched the surface of what the technology can do for professional development. When people are frustrated with the technology and its limitations, the answer rests in learning more about what the technologies can offer, rather than shutting down the process.

A positive attitude shift towards computer technology

Another significant opinion of 15 respondents (19%) is that there has been an attitude shift. Where there was once resistance to using computer technology as a learning mode, people are more comfortable with it. Skills and comfort levels with computers and the multiplicity of technologies have grown. Respondents noted many practitioners had access to computers in their offices and homes and there were an increasing number of people who have access to high-speed Internet. Literacy workers were once struggling to figure out how to "attach a file;" they are now faced with blogs, *Blackboard, Skype,* and *Elluminate.* The "early adopters," those who readily embraced the technology, helped to pave the way for others in the literacy field. While there may be a modicum of resistance still present, respondents felt strongly that online learning is a permanent feature of literacy learning and its practitioners "must get on board".

Identification of appropriate applications

Fourteen respondents (18%) also recognize that effective online learning is subject or content-specific. They stated that some topics or some content benefit from the online/reading/writing-focused learning environment. Once people in the field have experience with the technology and with online learning, they can identify where it can be used most effectively, and where face-to-face training is most beneficial.

In areas where they have made the effort to promote the use and value of online learning, a culture has developed that readily accepts online learning as just another way of doing business.

"In the Columbia Basin [East and West Kootneys, British Columbia]
we have worked hard to develop a culture where you can use online
learning, know how to use it, what to expect from it, and what its
limitations are. It is a good way for us to do some of our training and
professional development."
— (Interview respondent from a community-based organization)

For professional development and training, when online is needed, it will
be used, and when face-to-face meetings can take place, they will. In this
view, one mode of training will not replace the other. Respondents noted
that one mode of learning was neither better nor worse than the other;
rather, they each have advantages and disadvantages. Respondents felt it
was critical for practitioners to become familiar with each so the benefits
can be reaped when needed.

The way of the future because it is convenient and cost effective

Nine respondents (11%) supported online learning because it was a
way to obtain necessary training that was otherwise not available due
to reduced budgets for travel and professional development. In these
responses there was a sense of resignation to online learning methods as
opposed to the enthusiasm that was evident in other responses. There is
the view that as funding shrinks and as time becomes more of a factor
for practitioners, the importance and perhaps urgency of online training
methods will grow.

"...there is certainly a need for online training, support and
professional development. The main thought for me is that my
professional development budget is limited and to travel to another
location and perhaps stay overnight uses up significant amounts
of money that could be used for training. Online training is also
convenient to be able to access it in your own office space."
—(Survey respondent from a community organization)

More identification and sharing of effective practices

Two respondents (2%) argued that more work can be done to promote
the benefits of online learning. They called for more sharing of effective
practices around online learning so the learning curve for others is not as
steep as it was for the early adopters.

"I also think we need to creatively find ways to profile the positive results of online initiatives. That will heighten our understanding not only of how to use it, but how it is contributing to our field."

—(Interview respondent from a community college program)

Conclusion

Question Six was intended to discover what members of the Canadian literacy community felt was the future for online learning methods in their field of practice. Overall, members of the Canadian literacy field who answered the survey and were interviewed by the internal team know that online learning methods and techniques are now a permanent part of the learning landscape. They strive to find creative ways to make online learning effective for both practitioners and learners by blending it with face-to-face learning, exploring different technologies, trying to replicate the face-to-face experience, and by building confidence in the technology.

"Hard question! I don't know. Some people do so well with it and it does allow for people in remote places to be included ... but there is something that happens when practitioners meet face-to-face, away from their busy workday that cannot be beaten."

—(Survey respondent from a community college)

Conclusion

In this section of the report, the research results collected from response to the internal surveys and key informant interviews are summarized. The internal team analyzed responses to each of the six questions of the survey and key informant interviews, as well as the demographic information about the respondents.

Based on the responses the internal team received, members of the Canadian literacy field are slowly and steadily learning about — and in many ways, embracing — the technology. Some regions of Canada are further developed in this area than others. According to the respondents, a wide variety of platforms and software are being used in a multiplicity of ways to inform, engage, train, and inspire Canadian literacy practitioners.

The Internet and use of computer technology is enabling members of the Canadian literacy community to stay connected to each other and reduce isolation. It is also giving practitioners a new way to do their work as they find ways to engage in collaborative projects online, to research and develop learning materials, and to work with learners and tutors in virtual classrooms.

Practitioners who engage in online and distance learning are finding ways to save time and money on travel and accommodations to training events. As well, online and distance learning is providing them with faster and less expensive access to learning materials and other sources critical to their practice. Use of online technology is giving practitioners access to innovative ideas and practice so, regardless of where they live, they can stay abreast of policy developments and training opportunities. Finally, practitioners know that their learners need to be proficient and confident on computers in order to keep up with the rest of the world, and that fact is a strong motivation for practitioners to learn more and develop their own skills and knowledge.

While online training and certification is not at the top of respondents' lists of objectives, the desire to learn more and to develop a multiplicity of skills related to their practice is a driving force behind many of their Internet searches and online engagements.

Respondents noted many positive benefits for online learning, which include increased access to professional development opportunities and knowledge, despite geographical barriers and scheduling conflicts;

opportunities to address practitioners' needs and allow them to work at their own pace; and increased access to relevant materials. Online learning also provides participants with an increased ability to save time and money on training, professional development, and acquisition of knowledge, especially around travel and accommodation costs; improved skills and knowledge; and increased networking opportunities.

Negative aspects of online learning as reported by respondents include frustrations getting people online and used to technology, technical glitches, not having sufficient technical equipment to do the task, learning styles not being addressed, and the social and group dynamic aspect of learning not being satisfied. It is difficult to determine from the surveys if respondents reporting these negative results were participants or facilitators, or both.

When asked about the differences between online learning methods and face-to-face learning, respondents provided more varied positive results or differences than negative results. Their positive results focused on increased learning opportunities, saving time and money, the view that online methods allowed for more reflection and in depth study, and the advantage of working at one's own pace. The negative results or differences noted tend to cluster around the quality of learning and engagement that a participant obtains from face-to-face learning compared to the more individual online methods being used by respondents.

For the most part, based on the information and data gained from the research, it appears the literacy field has tried several ways to ease people into online learning. Some methods have been more passive than others, yet all seem to have the direct intent of exposing participants to the technology and communicating ahead of time what is required in terms of hardware and software. The problems or negative aspects of introductions to online learning seem to be in the realm of "technical glitches" which were not identified or described in any detail.

Overall, members of the Canadian literacy field who returned the survey and were interviewed by the research team know that online learning methods and techniques have arrived and are here to stay. They are striving to find creative ways to make it work by blending it with face-to-face learning, exploring different technologies, developing online facilitation skills, and building confidence in the technology.