Crossing the Great Divides:

Distance learning and flexible delivery in Adult Basic Education

Research report for Ontario's Literacy and Basic Skills Program

















Paul Porter | Matthias Sturm

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Authors

Paul Porter, Ed. D.

Dr. Paul Porter has served as a school counselor, elementary school principal, secondary school principal, director of special education, director of pupil services, and school district superintendent for 17 years. He is an associate professor and director of the joint doctoral program in educational leadership at Sonoma State University. His research interests and writings have included distance learning, project evaluation, mentoring and succession planning, organizational development, leadership and team building. He has a B.S. from the University of California, Davis, a M.S. from California State University Sacramento, and an Ed.D. from Bringham Young University.

Matthias Sturm, M.A.

Matthias Sturm is the Distance Learning Coordinator at AlphaPlus Centre and coordinates communications and support in the areas of resources, technology, and research of this research project, aiming to develop learner-centred flexible learning models in partnership with rural and remote literacy programs. He also worked on a research project documenting the perspectives of adult literacy learners on web-based learning and its impact on their learning progress. He has a B.A. in Education and Philosophy from Concordia University and a M.A. in Distance Education from Université du Québec.

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Executive summaries of this research report are available in English and French. Electronic versions of the summaries and the full report are available on-line, in PDF format, at: http://distance.alphaplus.ca



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MTCU

Ontario's Ministry of Training, Colleges and Universities' Literacy and Basic Skills (LBS) Program provides literacy, numeracy and essential skills services that help learners achieve their goals related to further education or training, employment or independence. LBS services are offered through almost 200 agencies at some 300 sites across the province. The Ministry also promotes literacy in Ontario by encouraging and supporting research and development initiatives in literacy and by ensuring that those agencies offering the LBS Program have the support necessary to provide quality literacy services.

HRSD

The mission of Human Resources and Social Development is to ensure that Canadians have opportunities to develop and improve the ever-expanding literacy skills needed to function at work, at home and in the community, and to support the development and dissemination of information on literacy issues to increase awareness and understanding. With their partners, HRSD supports activities to improve literacy skills in Canada. Since 1988, HRSD has funded over 7,000 innovative projects in order to meet this objective.

Organization

AlphaPlus Centre

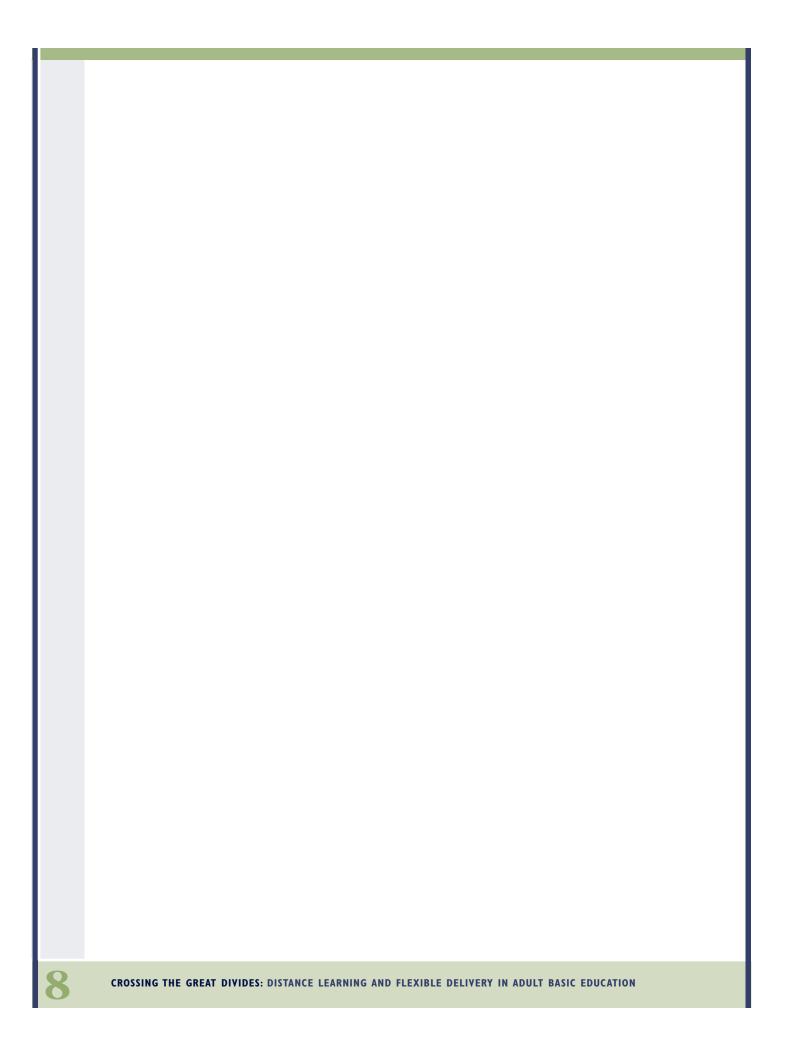
AlphaPlus Centre promotes best practices in adult basic education in the Deaf, Aboriginal, Francophone and Anglophone communities in Ontario through the innovative use of technology, research, and the development and dissemination of information and resources.

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Introduction

With continued support from the Ministry of Training, Colleges and Universities (MTCU) and the National Literacy Secretariat (NLS), the overall objective of this project was to begin to explore possibilities for distance and flexible delivery of the Literacy and Basic Skills (LBS) Program in the Province of Ontario, Canada. To date, the project has consisted of two phases as it addresses the literacy needs of various traditionally underserved populations.

In project Phase 1, from July to November 2003, four LBS agencies were chosen to explore distance learning for their literacy services. The agencies were provided with information, training, resources, proposal development guidance, and other supports in order to create a feasible plan for distance delivery in each respective region. In project Phase 2, from December 2003 to March 2005, a research plan was established and research activities were coordinated across the four participating agencies. The four LBS agencies chosen to implement distance learning continued to be provided with information and support services including training and resources support to implement their distance delivery model.

The project sites began distance delivery of LBS programming in April 2004 with a first data collection period running concurrently until August of the same year. Most project sites continued to offer their program throughout the summer. The data collection continued from September 2004 until March 2005. Data gathered throughout the project phase was used in the review of the research methodology and in making necessary adjustments.

Prior to the start of this project, MTCU and AlphaPlus Centre established that research in the area of distance delivery and flexible learning¹ for adult literacy was needed, focused on a review of the relevant literature and on direct field research. Following tenets addressed through the Recognition of Adult Learning Strategy (RALS), such as an outcomes-based approach to instructional design, individualized goal-directed programming, and an emphasis on learner self-direction, as well as through MTCU's strategy document on integrating technology into literacy programming, Tools for a New Beginning, it was an opportune time to explore how e-based resources such as AlphaRoute, as well as other modalities, could be used to offer literacy learners more flexibility in learning to meet individual circumstances, preferences, and needs.

AlphaPlus had been in discussions with MTCU for over a year about the possibilities of a distance delivery pilot project that would explore piloting AlphaRoute, a web-based learning environment for adult literacy learners made available through AlphaPlus. From November 2002 to February 2003, AlphaPlus participated in a number of meetings with MTCU staff on how to carry out a flexible learning project that would benefit both MTCU and AlphaPlus in terms of much-needed research in these areas:

- Flexible delivery of adult education, particularly distance learning
- Implementation of various models of flexible delivery within the LBS Program
- Exploration of factors influencing success, and ways to track progress and to support learning
- Flexible delivery of professional development and continuous supports for practitioners
- Resource support development in the area of e-learning for flexible delivery of programming
- Best practices for AlphaRoute delivery within a flexible approach

Ontario's LBS Program has benefited directly from this project in terms of receiving valuable research information to inform MTCU about future direction of distance and flexible delivery of adult literacy

^{&#}x27; "Flexible learning expands choice on what, when, where and how people learn" (The Australian Flexible Learning Network, 2005) http://www.flexiblelearning.net.au

programming. Consulting literature in this area has proved very useful in informing the programs as to how they might explore options for distance and flexible program delivery and how they might enhance other aspects of distance and flexible learning, such as learner control and individualized goal-directed programming. Literacy programs funded by the LBS Program will benefit from the knowledge gained through this project. Many agencies have been interested in pursuing distance delivery – both direct delivery agencies and networks. The information from this research and report will serve as a useful foundation from which to explore possibilities for distance and flexible learning in the future. As well, many agencies have appeared to require a great deal of assistance in using web-based learning tools such as AlphaRoute. This project has resulted in information resources that have supported e-learning in LBS programs, as well as information that has supported the enhanced use of AlphaRoute. Overall, adult literacy learners will benefit from this project through increased understanding of literacy learning support needs within a distance and flexible delivery context, of online learning support needs, and of possibilities for a virtual community of literacy learners in Ontario.

What is Flexible Learning and Distance Learning in Adult Literacy?

As a current trend in distance learning opportunities, flexible learning has been explored in universities and other educational settings internationally. In Ontario, MTCU has started to look at possibilities for flexible delivery options in LBS. The idea of providing flexible opportunities for learning rests on a belief in learner-centred, self-directed, and goal-directed learning. This is in line with MTCU's RALS, which began roughly ten years ago and included a learning outcomes-based approach to literacy programs, using five literacy levels for communicating achievement, as well as a common assessment approach. Along with this strategy, MTCU developed the "Computer-Based Learning Strategy" in 1998. Flexible learning follows on the Computer-Based Learning Strategy² and fits within an outcomes-based goal-directed programming model.

Among key aspects of flexible learning are meeting individual learning needs through providing opportunities for:

- Learning in the student's own way by using resources and tasks that suit the student's individual learning style and preference
- Learning at the student's own pace and at the times that suit the student best
- Focus on achievement not determined by a set time for learning or a set amount of material
- Learning content, process, outcomes, and assessment to meet individual circumstances and individual goals
- Easy access to programs, multiple starting points or continuous intake, and cross-program articulation
- Goal pathways defined by individual choice in learning content related to goals
- More choices through students' control of their own learning programs and outcomes, increasing
 active participation in their learning and creating more opportunities for collaborative learning, as
 well as offering support and access to user-friendly administrative systems that are responsive to
 individual needs

² MTCU (2000). *Tools for a new beginning:* A strategy for computer-based learning in literacy. Literacy and Basic Skills Section, Workplace Preparation Branch, Ministry of Training, Colleges and Universities. Toronto, Ontario. http://hello-allo.ca/preview/pdfs/CBLLE.pdf

In comparison to traditional educational models, flexible learning is broadly characterized by:

- Less reliance on face-to-face teaching and more emphasis on guided independent learning; teachers become facilitators of the learning process, directing students to appropriate resources, tasks, and learning outcomes
- Greater reliance on high-quality learning resources using a range of technologies
- Greater opportunities to communicate outside traditional teaching times
- An increasing use of information and communication technologies (ICT)

Flexible learning is not synonymous with the use of ICT, but ICT is often central to much of the implementation of flexible learning, for example in using learning resources, providing a communications facility, administering learner assessment, and hosting learner support systems.

Distance learning is a form of flexible learning in which the instructor and learner are separated during some or all of the time spent in learning. Distance learning refers to a whole spectrum of teaching and learning modalities that occur in non-traditional face-to-face classroom settings. Distance learning can take many forms including video checkout, online learning, home tutoring, independent study and workbook completion, television wraparound models, and more. In addition, distance learning may not be an either-or proposition. For instance, distance learning may include a component of students working independently at a distance and then meeting with the instructor or with fellow students studying the same subject. Another method, termed a "blended" model, may include dual enrolment in both a distance learning course and a more traditional classroom course.

This blended model can be useful for supplementing instruction, for allowing students to review, and for advanced study of the subject presented. A recent study also points to viewing "persistence" as a key to adult learner success.³ Persistence can be defined as the length of time a student stays enrolled in a course or program, but it can also be viewed as the learner's total educational experience over time and whether the adult learner continues to pursue education in various forms. For instance, a learner may enrol in a course, make good progress for several months, and then "stop out" due to family, home, work, or other reasons. Distance learning may allow the student to continue to study and "bridge" the time in between.

Another study indicated that students in blended models make even more progress academically than students enrolled in either distance learning or traditional classroom instruction alone.⁴ Distance learning allows the addressing of many different types of barriers for adult learners. These barriers, or great divides, include work schedules, childcare, family obligations, distance, self-confidence, need for repetition, lack of traditional classes in certain locales and more.

This project also provided evidence of the potential for enlisting and incorporating local community resources, supports, and expertise, and for promoting collaborative approaches to program design, development, and delivery. This combining of local and distance learning resources proved an effective means for gaining the trust of isolated and Aboriginal communities, in that it provided a means to honour local expertise and culture while infusing other materials, teaching, and distance learning

³ Comings, J. (1995). Literacy skill retention in adult students in developing countries, in *International Journal of Educational Development*, 15 (1).

⁴ Porter, P. and Woolley, V.M. (2002). *Third party project evaluation: Adult education innovations and alternative delivery program.* Los Angeles Unified School District: Division of Adult and Career Education.

resources. Although building strong partnerships in Aboriginal communities may take long-term commitments beyond the project period to date, these emerging partnerships represent a foundation to build on in the years to come while providing valuable insights for program opportunities in other communities.

The traditional view of distance learning is often limited to a student with a book watching a remote broadcast or viewing a video. While these are certainly models of distance learning, this project has gone far beyond this limited view. Distance learning is also often seen as being only for more advanced students or students with very high technological capabilities. Again, by addressing a variety of learners and by using alternative means of delivery, this project has begun to go beyond traditional views of learning at a distance. This project has challenged the traditional view that technology and adult literacy do not mix and has opened up many areas for potential exploration and use.

Research Questions

MTCU drafted the following research questions to begin to explore during the course of this continuing project. The study provided answers to some of these questions. For others, due to the pilot nature of the study and the relatively small sample size, the study was limited to noting trends in the data and identifying issues and questions for further study. The reader must be careful about overgeneralizing the results of this study at this time. The drafted research questions were:

- In what ways can distance learning maximize the effectiveness and efficiency of the LBS Program?
- What are the essential programming elements to support learners, staff, and agencies in a distance learning program?
- How should a flexible learning model of LBS delivery be implemented and sustained?

While understanding that this project and associated research were a pilot study, in asking these broad research questions, MTCU specifically asked for information in the categories below. With the project entering its third year, it is expected the results during the first two years of this project will guide the research further in identifying best practices in the following areas:

- Instructional Design and Standards of Practice
- Content and Media Selection
- Learner Support
- Practitioner Support/Professional Development
- Agency Infrastructure
- Performance and Accountability (See Appendix A, Project Proposal Call.)

Brief Description of the Project Agencies and Pilot Sites

Following is a description of each site as provided by site personnel from each respective project agency. All project agencies have multiple pilot sites which are included in the descriptions.



From four literacy agencies, 154 learners ranging in age from 27 to 39 participated in this research study. Almost three-quarters of the participants were women, the preferred language of two-thirds of the participants was English, and half of the learners were not employed at the time of the study. On average, almost two and a half years had passed since the participant's last upgrading course in an on-site environment. Almost half the participants reported their learning goal was to pursue further training and almost the same amount said they would rather work independently toward achieving their goals. Each of the four programs differed in population served, method of instructional delivery, and curriculum. The project coordinators of the participating literacy agencies provided the following descriptions of the distance learning programs delivered within the context of this project.

Centre de formation pour adultes J'aime apprendre inc.

MULTI-MODE TRAINING AT THE LITERACY LEVEL

Creating a program aimed at distant learning for literacy level learners was challenging. The terms "distant learning" and "literacy" were not linked to each other whatsoever. There existed very few models for basic skills training at a distance. We worked on combining traditional teaching methods (in-class scheduled group meetings, pen/pencil and paper, tutorials) with distant learning techniques (Internet, email, CD-ROMs) for independent and motivated learners.



The results of our pilot project have demonstrated the validity of and the need for a training program adapted to each learner needing help to improve his/her skills. The results also reflect the need for a wide range of teaching methods and a good variety of activities available upon the learner's demand. The methods chosen at our centres permitted a hairdresser to practise her grammar skills between her scheduled appointments, permitted a mother to learn grammar rules during her children's hockey practices, and permitted another learner to study 25 hours per week while surfing the Internet. The project gave all the participants a chance to profit from the hundreds of resources available online, on CD-ROM, or in a regular classroom.

With a 76% success rate, we concluded the interest in such a program was sufficient to proceed. Certain learners acquired new skills and were very interested in continuing with the program. The integration of computer technology with literacy leads us to believe there could be greater self-determination and an increase in independence in today's learners.

Kingston Literacy (CLCN)

DISTANCE DELIVERY DEVELOPMENT PROJECT

CLCN (Community Learning Centre Napanee) has been working in partnership with MTCU and NLS and four other literacy programs across Ontario to develop and implement a model for delivering educational opportunities to adults who would find it difficult to attend a traditional LBS program. This has been an exciting, though challenging, occasion to be part of an innovative service delivery model.

The Distance Delivery Development Project allowed eight to ten learners in the Tamworth and Kaladar communities to access a blended and



flexible literacy program from their homes, thus meeting the training and computer components of the LBS guidelines. The learners were at Levels I-4, fitting the mandate outlined in CLCN's business plan. Two mentors were hired for the learners in Tamworth and Kaladar and met with learners on a weekly basis in the learners' homes. A computer with Internet access was placed in each learner's home. There were also on-site locations in each community for distance learners to meet, ask questions, and participate in group learning activities. Each learner was assessed and developed an individualized training plan with the support of the staff at CLCN.

Strengths of the project included supporting people who cannot attend a regular program, changing learners' outlooks on learning, developing self-esteem and self-confidence, enabling people to take risks, increasing opportunities, learners feeling that computers have "brought the world to them", and support from each other and AlphaPlus.

Sioux-Hudson Learning Centre

GOOD LEARNING ANYWHERE

The Sioux-Hudson Literacy Council Good Learning Anywhere (GLA) project consisted of three focus pilot groups/locations: Pikangikum, First Nations Management Training (FNMT), and Hudson.

Pikangikum Site

Description of Learners: Individuals who had dropped out of school, and who still had goals to reach in order to complete their education through either Grade 12 Independent Learning Centre (ILC) or General Educational Development (GED) preparation. Learners had the required technology skills, yet had been tested and assessed at, on average, Level 2 reading.

Key Learner Issues: Retention issues with this group were a key component as the majority of learners were under the age of 25 in a community strongly affected by substance abuse issues. The community was a remote location not currently serviced by other training groups.

Successes: For such a small and isolated community, the initial interest was impressive. It was also impressive that representatives from AlphaPlus visited the community to assess the site, considering the community's remote location.



First Nation Management Training (FNMT) Program

Description of Learners: Northern residents who were employed, yet did not have the appropriate literacy skills to fulfill their expected job descriptions and/or needed upgrading in order to participate in professional development training required by their employers.

Key Learner Issues: Motivation was not as strong for these learners because they were doing job-required training.

Successes: The site enrolled an impressive number of students. This program was also successful in that the participation rate was high. As well, this program was successful at launching training through the use of Centra in the Northern communities.

Hudson Site

Description of Learners: Adults who did not have access to a literacy program and who were requesting literacy services. This group included Ontario Works (OW) recipients who were required to attend a skills development program but did not have access. Although the main goal was employment, further education and training were also included as outcomes in the needs assessment performed by the Sioux-Hudson Learning Centre.

Key Learner Issues: High-speed Internet connections were not available even though initial information stated there would be three Internet service providers. Obtaining a consistent number of learners to partake in the program was a struggle.

Successes: A success for this program was obtaining high-speed Internet access. A bigger success occurred in Phase 2 when learners finally felt comfortable with the program and started to spend 20-30 hours a week with their materials!

Confederation College

LBS DISTANCE DELIVERY

With an emphasis on providing a flexible learning option, the LBS distance learning pilot provided evidence that a variety of barriers to literacy may be overcome. Supported by one-on-one and small group instruction, learners were provided opportunities to engage in independent learning activities.

The LBS Distance Delivery Resource Toolbox, a web application developed for the pilot project, provided learners and teachers/mentors with access both to a range of online learning resources including AlphaRoute and to Confederation College LBS print materials (available in PDF format). In addition to minimizing the need for more complex web navigation skills, the Toolbox allowed mentors to assign materials to individual learners as needed, to direct learners to relevant online resources, and to post all-user and individual messages. Resources in the Toolbox were supplemented by texts and instructional software; utilizing a range of learning resources, materials, and activities, teachers/mentors were better able to address variances in learning styles and learning preferences. Used in conjunction with the Toolbox and other learning resources, personal planners served to target immediate learning priorities, to establish



short-term learning goals, and to provide a clear focus for independent learning activities.

At the Thunder Bay campus, services were provided to OW learners and others whose personal

At the Thunder Bay campus, services were provided to OW learners and others whose personal circumstances prevented them from participating in the on-campus program. Learners were at Level 3 in communications and numeracy and generally possessed good computer skills. At the Kenora campus, services were provided to learners in two rural Aboriginal communities, to individuals referred by OW, and to individuals who, due to personal circumstances and responsibilities, were attracted to the flexible nature of the program. Learner levels varied from Levels 2-4 in communications, with all learners being at Level 3 in numeracy. In both Aboriginal communities, facilitators were available to learners four days a week on a drop-in basis. As well, the Kenora teacher/mentor visited communities on a regular basis for face-to-face meetings with learners.

Methodology

Prior to the actual selection of sites and beginning of instruction, MTCU and AlphaPlus engaged in an extensive effort to identify the key areas for the investigation and research that would be carried out for this project.

The methodology of the research itself began with the selection of four agencies to participate in the study. Project sites were chosen that represented a variety of community settings and learner needs in order to test the effectiveness of distance learning and to gather valuable data, which could be used later as the program was refined and moved to wider-scale implementation. Sites were provided with extensive assistance in developing a business plan and in completing a thorough needs assessment of their communities and learners to be served. Since most of the project agencies chosen for this study were in rural and somewhat isolated communities and in areas with large Aboriginal populations, project coordinators soon learned the importance of engaging in an analysis of learner needs and also of spending time developing trust and co-operation within the community to be served. One of the strengths of the project was the capacity of site staff to adjust their programs and delivery approaches to reflect the diverse needs and realities of individual learners, communities, and agencies. Affording sites such latitude ensured a dynamic and responsive approach to initial and ongoing program design, implementation, and development.

After an initial period for each site to formulate their program, hire staff, and develop a business plan, the sites began to implement their instructional programs. Also, in the early phases of the project, training and support were offered to sites to help them prepare for delivery. Distance delivery of instruction can be very different than traditional classroom methods; in many cases, teachers have to learn new techniques and methods for delivering instruction, right along with the learners.

Following the development of a business plan and delivery model, each site then proceeded to initiate the recruitment of learners and to design orientation processes for incoming students, as well as professional development for teaching and support staff. Also at this time, an independent evaluator was chosen to help guide the type of data to be collected, to research design, and to integrate lessons from other distance delivery projects into the design of this research.

Following the development of their respective recruitment plans, each site began to identify and enrol students. As soon as possible after the placement of each learner in the program, learners were given a number of intake and pre-assessments to determine their demographic profiles, their academic skills levels, and their readiness to engage in distance learning and to use support technology. These assessments were administered by site staff and were consistent from site to site, with the exception of literacy skills assessments. Each project agency followed its regular literacy skills assessment practices, and the results were reported using the following assessment forms:

- Common Intake Instrument an intake instrument to determine various demographic factors
- Is Distance Learning for Me? a distance learning self-feedback instrument
- Learner Self-Management Survey a survey assessing learner self-direction, independence, support, and motivation
- Learner Technical Skills Survey a pre-assessment to determine level of technology skills
- Literacy Skills Assessment a pre-assessment to determine level of literacy in several areas

Students then began their course of study in the program. Various methods of instructional delivery were used at different sites. Being a pilot study, sites were given great latitude to determine the method of distance instruction, form of teacher interaction, and mode of student independent activities.

All programs monitored learner progress, offered continuous support, and made adjustments to their program delivery as they learned more about the profile of their learners and their unique needs. Some programs found students needed a great deal of structure initially. Others found learners more ready to embark on independent activities. In some cases, learners had the tools necessary to begin study at a distance. In other cases, a more extensive orientation process was needed.

During the course of the program, staff kept logs of the time they spent in various types of activities in the program. The purpose of this tracking was to learn more about how to structure staff time to best serve a program that, in large part, was delivered at a distance. These staff logs were compiled each week and submitted to AlphaPlus for analysis and monitoring. Time was tracked in three general categories:

- Interactive contact with learners such as emailing, face-to-face meetings, and phone contact
- Other contact hours with learners such as training, orientation, and giving assessments
- Non-interactive activities such as lesson preparation, outreach, travel, and administrative tasks

In addition, learners also logged how they spent their time. Time was tracked in three general categories for learners:

- Independent learning activities such as reading, watching videos, working online, and using web-based learning environments
- Interactive learning activities such as face-to-face meetings, phone calls, emails, et cetera
- · Orientation and self-support activities

Since each program provided instruction for varying amounts of time per week, and since individual students studied in the program at different rates, it was necessary to set a threshold, beyond which students would be administered a post-assessment of their skills and progress. This threshold was determined to be 100 "instructional hours" (calculated based on the learner reaching a 25-hour threshold of interactive activities, which is typically accompanied by about three times that amount in independent learning activities, or 75 additional hours, for a total of 100 hours). After completing approximately 100 hours of instruction, learners were given post-assessments in literacy and technology skills to determine their progress in each of these areas.

Finally, upon completion of a term, or if a learner were to leave the program, an exit survey was administered to determine the learner's reason for leaving and to gain feedback about program strengths, weaknesses, and effectiveness.

As part of the program evaluation, AlphaPlus personnel also conducted site visits. These visits yielded valuable data about program start-up, problems incurred as programs were initiated, the culture and demographics of the communities being served, and infrastructure issues, as well as other information. Site visits also gave AlphaPlus staff the opportunity to meet with project personnel and learners and to learn first-hand about the communities and project goals. Feedback from AlphaPlus staff indicated these site visits were valuable both for gathering data and for future coordination and monitoring of the program and the associated research. Throughout the project, feedback and data were also forthcoming from the project sites via group meetings, staff development sessions, monitoring by AlphaPlus, and other less formal contact.

To provide additional comparison data for this study, control groups were chosen at Confederation College and at Napanee Community Learning Centre in co-operation with Kingston Literacy. Excluding a separate group of 47 learners (who were surveyed on preferences in relation to on-site and distance learning environments alone), these control groups totalled 33 learners, with 23 learners having accumulated enough hours to qualify for data analysis at the time of the production of this report. Some data is still being gathered from these control group learners. Control group learners were administered intake surveys and pre- and post-assessments⁵ of literacy skills and

⁵ Pre- and post-assessments were administered before and after "instructional hours" totals of 25 hours for distance learners, and 100 hours for onsite learners. See "Assessment Methods and Instruments" for more information.

technology skills. The results of the control group study must be viewed with caution because these learners were not matched specifically to project participants and because the sample size was fairly small. However, the control group learners were engaged in the same program as project learners, and were also assessed according to the same parameters and after the same amount of time.

At the end of this cycle of the project, data was compiled and analyzed by an independent evaluator and by AlphaPlus staff. Conclusions, findings, recommendations, issues for further investigations, and suggested next steps emerged and are presented in this report.

Please note that an agency-related difficulty at Centre de formation pour adultes J'aime apprendre inc. prevented project staff from continued participation in the research while program delivery was continued. All quantifiable data was obtained after the resolution of these difficulties and every effort was made to gather as much qualitative information as possible to interpret data analysis results accurately.

Project Agency-Specific Data Collection

In addition to the forms and instruments used to collect data for the project, each pilot site used other data-gathering procedures and instruments to supplement this data, to provide information for local use, to meet needs for an assessment more appropriate for the site or for the language spoken on that site, or to explore issues at a deeper level for their own use. Some of these agency-specific data collection methods are described below.

Centre de formation pour adultes J'aime apprendre inc.

In addition to the collection of information for the online surveys, J'aime apprendre conducted weekly written and oral surveys with learners and project staff to evaluate needs. At the end of the project, learner interviews and analyses of learner journals were conducted. Following a research-action approach, the program delivery model and support services were adjusted throughout the project to ensure the success of each learner.

Kingston Literacy (CLCN)

At CLCN, staff supplemented online surveys with other forms that helped to track program data. These tracking forms included a weekly report for the learners, completed in conjunction with the mentor prior to the completion of each session. This report served to track in more detail work completed during the session, specifics on division of hours, session feedback, and homework. Other supplemental tracking forms included flow charts for AlphaRoute access, computer access, and assignment completion, and charts for recording completion of writing tasks.

This project agency also operated a control group to provide comparison data for the project. A significant number of on-site learners served as a control group to establish a benchmark against which the progress of distance learners could be measured. In addition, instructors and support staff in the on-site program were surveyed to determine the differences in distribution of working hours for on-site learning versus distance learning.

Sioux-Hudson Learning Centre

Some issues were encountered in collecting contact and study hours from learners in the FNMT course. The literacy and numeracy upgrading component provided by the Sioux-Hudson Learning Centre offered preparatory and accompanying learning opportunities for these learners. However, learners attending this program had a primary goal of getting their work done, learning material for upcoming training, and generally participating in the management training program related to their employment. Therefore the motivation for students to pay close attention to the tracking and reporting of their contact and independent study hours was low. Students largely self-reported without close supervision of recording procedures, so these data on hours must be viewed with caution.

At the Hudson site, where there was an available site mentor and students were actually coming to the site three times each week, collecting contact and independent study hours and following up on accuracy was more easily facilitated. Weekly forms were created in two different formats, which allowed learners to have time sheets available to fill in while they were working at home. The use of these forms offers promise as a method for tracking participation hours at other sites in the future.

Confederation College

Confederation College used their own LBS intake instrument, which included assessment and level placements used in their on-site program, to determine learner levels of literacy. The distance program also used biweekly planners in conjunction with progress sheets. Along with these, instructors also used demonstrations, tests, and exams, to measure learner progress toward learning goals.

Confederation College also operated a control group to provide comparison data for the project. A small number of on-site learners served as a control group to establish a benchmark against which the progress of distance learners could be measured. A larger number of learners contributed to establish preferences for on-site versus distance learning environments.

Agency-Specific Research Interests

Some of the sites involved in the study identified and carried out other more specific, and often informal, research interests. These are listed below.

Centre de formation pour adultes J'aime apprendre inc.

J'aime apprendre's interest lay in evaluating the efficiency of the delivery model and how well the distance program responded to the needs of the community. More specifically, learner persistence, literacy skills, and technology skills were studied.

Kingston Literacy (CLCN)

The interests of this project agency have remained learners' employment goals, learners with children, and literacy opportunities for adults at Levels 1 to 4, while collecting information and evidence on the effectiveness of and possible obstacles to distance delivery. In co-operation with another learning centre within the CLCN network which had a larger number of on-site learners, a control group was set up to provide an opportunity to collect data on learner progress and staff engagement. The purpose of this data was to provide additional information to support the planning and implementation of future distance delivery models.

Sioux-Hudson Learning Centre

Sioux-Hudson began the use of Centra as a virtual classroom for particularly isolated students. Much was learned in the process, including set-up issues, how to adapt curriculum, and training learners in how to access the classroom. A self-guided orientation package was developed in clear language. Whenever possible, learners were expected to help each other if they were located in the same communities; a toll-free number was provided for technical support. The program is looking forward to collecting learner reaction to this virtual classroom. MTCU supported exploring the use of Centra for mentoring and instructional purposes. In addition, the program is exploring the use of the LBS system of providing video lessons on public television with workbook and Internet follow-up lessons.

Confederation College

The Confederation College program studied the efficiency and effectiveness of flexible distance learning in relation to its on-campus programs. The potential for expanding access to programs was explored on

two fronts: expanding access to LBS programming for regional campuses and isolated communities, which would provide a flexible learning option for learners who might not have considered training otherwise; and expanding access to post-secondary programs by reducing barriers. In co-operation with the on-site college program, a control group was set up to provide an opportunity to collect data on learner progress and learner profiles. The purpose of this data was to provide additional information to support the planning and implementation of future distance delivery models.

Program Infrastructure

All sites used AlphaRoute as a part of their program. Centra⁶ was used by all sites as part of the communication methods with AlphaPlus personnel and with each other. Methods of communicating with learners varied considerably, ranging from direct face-to-face interaction, to phone contact, to email. Textbooks, web-based materials, Internet access, various software programs, and other web-based resources made up a variety of instructional tools.

PROGRAM INFRASTRUCTURE

l'aime apprendre

Centra for project update meetings with other project participants

- Exploring Centra for mentoring and instructional purposes
- Web-based portal for learners to access online resources, information on mentor availability and contact, and information on scheduled distance or face-to-face meetings
- AlphaRoute learning activities (used as curriculum rather than as a resource)
- Internet access for learners at home and in a computer lab
- Textbooks and other printbased materials
- Software programs to address specific learning goals
- Telephone mentoring
- On-site computer skills training as orientation to the program in the computer lab
- Radio advertising

Kingston Literacy (CLCN)

- Centra for update meetings with other project participants
- Learner binder with orientation, schedules, activity logs, flow charts for troubleshooting and accessing websites, and selfhelp instructions
- Computer and Internet access provided at home
- Software addressing specific learning goals, e.g., spelling
- Textbooks and other printbased materials
- Access to websites, e.g., CNN learning stories
- Website-generated worksheets
- Web searches to access print-based materials
- AlphaRoute learning activities
- Basic College Math test online tutor
- Telephone mentoring
- Computer skills training in computer lab or learner's home

Sioux-Hudson Learning Centre

- Centra for mentoring and instructional purposes
- Centra for communication and training with mentors
- Centra for participant update meetings
- AlphaRoute learning activities and Cyber Search
- Internet access for all learners (at home or in computer labs)
- Learner binders with instructions for program orientation, online access to resources, trouble-shooting, & research
- Textbooks (math upgrading) and other print-based materials to add to the binders
- Software programs
- Telephone for assessment and mentoring purposes
- MSN Messenger as mentorto-learner and learner-tolearner communication tool
- Computer skills training through self-help manual & on-site orientation as needed

Confederation College

- Centra for project update meetings with other project participants
- Exploring flexible web-based conferencing options for mentoring and instructional purposes
- Web-based toolbox to provide learners with customized access to online resources and print-based resources
- Web-based toolbox to facilitate communication between mentors and learners through posting customized messages
- AlphaRoute learning activities and Cyber Search
- Textbooks with online tutorial/mentoring components
- Web-based resources
- Software programs
- Curriculum Matrix developed for the LBS distance pilot
- Telephone mentoring
- On-site computer skills training as needed

Table 1: Program Infrastructure

⁶ For more information on Centra: http://www.centra.com/

Program Delivery and Learners Served

Each of the four sites used slightly different program delivery methods. These methods were chosen to correspond with populations served and with resources available in the community. Methods of delivery varied, from drop-in centres, to computer labs, to learners accessing services from home. Target populations likewise varied according to the needs of the communities served. In all cases, the learners had significant literacy needs. Other characteristics of the populations served included being rural with little access to other services, being a part of work-related training programs, and having learners with transportation and scheduling issues.

PROGRAM DELIVERY: SERVICES PROVIDED AND METHOD OF DELIVERY				
	J'aime apprendre	Kingston Literacy (CLCN)	Sioux-Hudson Learning Centre	Confederation College
Site Description	Learners accessing from home in the area of Alexandria Home and lab access at Centre de formation in Cornwall	 Learners accessing from home in Tamworth and Kaladar (with on-site mentor support) Computer lab in Napanee (research control group) Regular LBS program at CLCN (research control group) 	Drop-in centre in rural community of Hudson Skills upgrading for Aboriginal learners in various fly-in communities via phone, print-based, & Centra Drop-in centre in Pikangikum	 Drop-in centre at OW location, Thunder Bay Learners accessing from home in Thunder Bay regular LBS program (research control group) Lab access at college campus in Kenora Lab access in Aboriginal community schools
Target Population	Learners with transportation and scheduling problems Learners without access to on-site LBS program Rural communities	 Learner with transportation and scheduling problems Learners without access to on-site LBS program Learners in need of life and literacy skills Parents of children attending local schools Rural communities 	 Learners with transportation and scheduling problems Learners without access to on-site LBS program Learners registered in FNMT needing upgrading Rural & isolated communities 	Learners with transportation and scheduling problems Learners in need of upgrading while registered with OW Learners without access to on-site LBS program Rural and urban communities
Mentor Implication	Mentor available in computer lab (Cornwall) Mentor available by phone & email (Cornwall/ Alexandria) Messages posted on website	 Mentor available by phone, by email, face-to-face, and for home visits (Tamworth/Kaladar) Mentor available in computer lab (Napanee) 	Mentor on site during drop-in hours (Hudson/ Pikangikum) Mentor available for support by phone, email, electronic messaging, and Centra (for FNMT)	 Mentor available by phone and face-to-face Mentor available in computer lab (Kenora) Community facilitator available in Aboriginal communities
Instructional Approaches	AlphaRoute Websites (general) Print material for grammar-based language learning, numeracy skills, and employment readiness	 AlphaRoute Websites (math) CD-ROM software Learner workbooks and other print-based material for learner independence and employment skills 	AlphaRoute Websites (general) Print materials for math upgrading with a business and accounting focus Print materials for academic upgrading and pre-GED	AlphaRoute LBS Distance Delivery Resource Toolbox Websites (math) CD-ROM software Curriculum Matrix adapted for distance learning program developed by College for on-site LBS

PF	PROGRAM DELIVERY: SERVICES PROVIDED AND METHOD OF DELIVERY			
	J'aime apprendre	Kingston Literacy (CLCN)	Sioux-Hudson Learning Centre	Confederation College
Community and Corporate Partnerships	Computers for Schools (computer donations) County of Alexandria LBS program	 IBM (computer donations) Computer Depot and local newspaper (ads for computer donations) OW Napanee Schools and businesses Children's counselling 	 FNMT Lost Lake Resource Centre Hudson Band Council Office Pikangikum 	 OW Thunder Bay & Kenora Band Council Offices Onigaming and Grassy Narrows Ontario March of Dimes Negahneewin College of Indigenous Studies Contact North/Contact Nord
Control Groups and Additional Research Activities	Computer skills orientation workshop	 On-site learner control group for comparing progress (20 learners) Comparing staff hours & activities between on- site & distance delivery 	Program delivery via Centra for instruction and mentoring (23 learners)	 On-site learner control group for comparing progress (13 learners) On-site learner sample survey for distance learner profiles (47 learners)

Table 2: Program Delivery: Services Provided and Method of Delivery

Project Agency Staffing

Each program employed a coordinator or program manager, various teachers or mentors, and support staff. In most cases staff were used in a variety of roles due to the size of the program. One program (Confederation College) also used a community facilitator for outreach and community-building activities. Please note that throughout several stages of the project, project agency staff may not have been able to meet their workload requirements during the working hours indicated in the table below and may have worked extra hours to ensure program- and research-related activities stayed on schedule.

	PROJECT AGENCY STAFFING			
	J'aime apprendre	Kingston Literacy (CLCN)	Sioux-Hudson Learning Centre	Confederation College
Coordinator Manager Administrator	Project Administrator: (24 hours/ week) Development of action plan for staff Project supervision and coordination Orientation sessions Planning of training Research for sustainability plan Data collection	Project Goordinator: (12 hours/week) Assessment and training plan development Data collection Staff orientation Project Manager: (24 hours/week) Assessment and training plan development Project management Orientation development Arrangement of mentor training Research Data collection Technical support (troubleshooting)	Project Coordinator: (10 hrs./week) Orientation with Advisory Council Stakeholders communication liaison Staff work plan Accounting procedures Progress report Recording research Building partnerships (funding) Final report Mentor Coordinator: (35 hrs./week) Staff work plan Best practices Data collection Intake & progress assessment tools Orientation for on-site mentors Learner orientation	Project Manager: (35 hours/week) Curriculum content development Technical support (troubleshooting) Communication liaison Professional developer Partnership development Multimedia content research Tracking of systems administration Motivational support for staff Teaching

PROJECT AGENCY STAFFING				
	J'aime apprendre	Kingston Literacy (CLCN)	Sioux-Hudson Learning Centre	Confederation College
Mentor Facilitator Teacher Trainer	Trainer-Mentor: (1x28 hours/week, 1x24 hours/week) • Training plan • Meeting with learners • Preparation of learning activities • Communications with learners • Assisting learners with log-keeping	Project Mentor: (2x14 hours/week Learning support Computer learner orientation Scheduling Lesson planning Meeting with learners and maintenance of regular contact Technical support Tracking of learner hours and progress Community liaison Project evaluation Community outreach	Mentor-Facilitator: (12 hours/week) Work plan development Research of varied technology tools Experimentation with support systems Testing of support systems Activity reports Orientation for on-site mentors Orientation for learners Troubleshooting Mentoring of learners Intake and progress assessment Training plan	Teacher-Mentor: (20-25 hours/week) Curriculum content development Learner curriculum planning Maintenance of log and journals Technical support (troubleshooting) Motivational support Community Facilitator: (2x16 hrs./wk.) Reading assistance Problem-solving Communication staff liaison Tracking assistance Community outreach Special events Technology assistance
Technical and Other Support	Technical Support: (2 hours/week) • Equipment ordering • Computer lab maintenance	Technical Support: (5-7 hours/month**) Upgrading Equipment ordering Orientation Maintenance Placing equipment in learners' homes Technical support for project staff Community liaison Evaluation **In-kind by various staff	Administrative Support: (5 hours/week) • Bookkeeping Mentor Support: (5 hours/week) • Learner Assessment	Technical Development: (Hourly amount n/a*) • Development of toolbox application provided by college technical department *This service was provided as an inkind contribution by the college and was not considered during data analysis since the service was not continued throughout the project.

Table 3: Project Agency Staffing

Areas of Program Expertise or Emphasis

Each program, either by initial design or over the course of developing the program itself, formulated areas of program expertise or emphasis. These areas varied, from unique use of technology, to differing use of recruitment and retention strategies, to methods of building community partnerships, to coordination with on-site programs. Listed below are some of the sites' perceptions of their areas of expertise or emphasis. These areas may be helpful to future implementers in dealing with key issues.

J'aime apprendre	Kingston Literacy (CLCN)	Sioux-Hudson Learning Centre	Confederation College
 Adaptation of on-site curriculum and assessment methods Supplementing materials for AlphaRoute Serving rural communities Learner recruitment strategies Referring and transferring learners from on-site to distance programs 	 Linking distance delivery model with on-site programs Building learning communities Building partnerships with corporations Action research Serving rural communities Family literacy Partnerships with public agencies, institutions, and other community-based organizations 	 Building partnerships in the community Community sustainability Serving fly-in and remote communities Development of alternative curriculum Using web-based applications for training, instruction, and mentoring Distance program development in Aboriginal communities 	 Blended learning resources and media Developing practices and approaches Technology support Adaptation of on-site curriculum and assessment methods Model flexibility Development of a web-based customizable toolbox for communication and resources support Distance program development in Aboriginal communities

Table 4: Areas of Program Expertise or Emphasis

Curriculum and Learning Resources

As a result of the varying needs of each pilot agency's learner population, curriculum and learning resources used during this project differed much from one project site to another. Further, community-based literacy programs in Ontario generally do not work within a set curriculum for adult learners, but rather develop a customized training plan for each learner and select resources that assist learners in working toward their learning goals. College-based adult literacy agencies, on the other hand, often individualize training within a curriculum-based approach. Through an interviewing process, AlphaPlus gathered information that was invaluable for supporting the pilot sites, for informing the materials acquisitions in support of adult literacy agencies interested in delivering programs at a distance or in a more flexible way, and for developing general print and electronic collections.

The Information Resources team at AlphaPlus provides on-demand information and resources to adult literacy agencies and to individual instructors and researchers in the adult literacy field in Ontario. The majority of clients are outside the Toronto area and most contacts with clients take place by email, by telephone, and through the Internet. AlphaPlus wants to make sure clients feel comfortable in connecting, so there is an emphasis on personal service. Care is taken to respond quickly by telephone whenever possible, so that good communications with clients are maintained.

One of the challenges was to make sure AlphaPlus clients had good basic information about available resources so they could make informed decisions when requesting materials. Over the years, AlphaPlus has worked at maintaining a very high standard of descriptive cataloguing and subject analysis of print and electronic resources so clients can find relevant and appropriate materials in the web-based catalogue. AlphaPlus has also provided detailed annotations of materials for a range of informational newsletters circulated throughout the field and through AlphaCom, a web-based discussion system that has been widely used as a communications tool in the field.

In providing information and resource support to the pilot sites, AlphaPlus drew on extensive experience in supporting distance clients. As the project began, the pilot sites did not yet know who their learners would be or what the learning goals of those students would be. Unlike distance delivery models in universities and colleges, AlphaPlus was not supplying designated materials to individual learners; there were no bibliographies or reserve book lists. The first step therefore was to establish a good working relationship with the coordinators of each of the project agencies so that as coordinators were developing their programs, they would be comfortable with the information resources staff at AlphaPlus who would assist them in locating appropriate print and electronic materials.

Preliminary face-to-face meetings with staff from the project agencies were conducted at AlphaPlus Centre. An orientation to the library collections and to the available Information Resources services was provided. Staff from each project agency had personal contact with Information Resources staff at AlphaPlus who emphasized their availability by telephone and email. As a result, coordinators and mentors from the pilot sites contacted AlphaPlus for specific information and resource support throughout the project.

Each project agency was invited to create their own mini-collections from AlphaPlus print-based resources to support distance and flexible program planning and delivery, and these collections were mailed to the pilot sites. AlphaPlus librarians worked with each program to develop the program staff's searching skills and to identify print and electronic materials in the catalogue. At each subsequent face-to-face meeting, project agency staff were encouraged to add to these collections.

During the initial phase of the project, AlphaPlus conducted detailed reference interviews with staff from each project agency to more precisely determine particular resource needs once the agency had recruited learners and planned a program. The pilot sites can be viewed as a representative sample of AlphaPlus clients, and of the diverse needs of the learner-centred goal-directed learning environment of the adult literacy field in Ontario. The sites identified a wide variety of resource and information needs. Brief outlines follow of the types of resources each project agency identified as important. Please note all programs used AlphaRoute as a required element of their delivery model.

J'aime apprendre needed general literacy materials in French, including grammar, writing, reading comprehension, basic numeracy materials, and materials related to job readiness and employment. As the only program to conduct learner recruitment per session rather than on a continuous basis, as well as adopting a more curriculum-based approach, this project agency followed a more structured approach to distance delivery of ABE. This resulted in using AlphaRoute activities beginning with Level 1 activities through Level 5, rather than using these activities as a supplement to other learning materials and resources, depending on the learners' goals and needs.

Kingston Literacy (CLCN) was primarily interested in learner workbooks and reproducible materials, with a particular focus on self-management and independence. The specific content areas identified were related to employment in the service industries, hotel work, clerical work, and jobs in the hunting and trapping industry. In addition, this program needed family literacy materials focused on parental support of primary-aged children and on parental involvement with school and homework. Specific software programs to assist learners to develop and practise reading and spelling skills were purchased and lent to the agency for the duration of the project.

Sioux-Hudson Learning Centre needed materials to support learners wanting to work on math and communication skills in preparation for college programs in business and administration, to support out-of-school youth working on academic upgrading and pre-GED, and to support general literacy learners. In co-operation with the FNMT program, which offers professional development courses for employees at

organizations serving Aboriginal communities in remote Northwestern Ontario, this agency selected appropriate print and e-based resources to assist these learners with reading, writing, and numeracy skills upgrading.

Confederation College was primarily interested in online links or CD-ROM products to support their toolbox⁷ model for mentors, which included print materials (particularly LBS print materials in math); AlphaRoute; websites; CD-ROM software for math, computer skills, and science and technology; and best practices in distance learning and flexible delivery. Extensive work was done on developing the toolbox and on adapting the on-site LBS Program curriculum for use in distance and flexible delivery of Adult Basic Education (ABE). Adapted weekly planners and progress sheets provided a logical progression, in line with the assessment practices of the on-site program, of activities and skills development dependent on individual learning needs.

AlphaRoute

The development of a web-based learning tool for adult literacy students in Canada began in Ontario in 1996/97 with this research question in mind: Can a web-based environment offer literacy learners an opportunity for learning? In response to this question, and with funding from MTCU and NLS, English and French web-based activities were created and presented thematically, accessible through symbol-based portals. Support was provided through email to literacy tutors in established literacy programs.

During 1998/99 the English and French portals were designed and new content was developed. Initially, AlphaRoute was developed as a distance learning site, one that would enable adult literacy learners to keep pace with the development of an emerging e-learning culture and to meet other learners online. AlphaPlus Centre and Réseau INTERACTION Network, Inc. carried out a research project⁸ to gain knowledge of the features learners valued in a web-based learning environment and to assess what supports learners required. The research focused on signs of learning independence, on learner control over the learning environment and learning direction, and on supporting learner control over the learning process while being mentored from a distance. Results showed that learners could attain a certain level of independence and the following were identified as essential elements: design of learning environment, mentor support, technical help for learners and mentors, on-site support, and features to support interaction with other learners. Learners recommended additional features and supports.

During 1999/2000 more content was added to the English and French sites and refinements requested by learners during the 1998/99 research were implemented. In September 2000 MTCU released *Tools for a New Beginning: A Strategy for Computer-Based Learning in Literacy*⁹, "providing LBS services, in new and effective ways, through computer-based learning to more Ontario adults", including Deaf adults, adults with disabilities, adults living in isolated areas where traditional delivery modes are not feasible, adults whose schedules do not permit them to participate in regular LBS programming, and

⁷ See "AlphaRoute Evaluation – Use With Other Learning Resources"

⁸ Larocque, D.L. (1999). AlphaRoute (Phase 2): A research report. Réseau INTERACTION Network, Inc.

⁹ MTCU (2000). *Tools for a new beginning:* A strategy for computer-based learning in literacy. Literacy and Basic Skills Section, Workplace Preparation Branch, Ministry of Training, Colleges and Universities. Toronto, Ontario. http://hello-allo.ca/preview/pdfs/CBLLE.pdf

adults requiring OntarioWorks (OW)¹⁰ services. This document recognized the fact LBS agencies across Ontario had much experience with integrating technology. One of the strategic directions stated this initiative would "support expanded participation in computer-based and web-based learning through the LBS Program", thus recognizing computer-based learning as a mode of delivering LBS services, of providing support and encouragement for using computers through the LBS Program, and of identifying opportunities for integrating computer-based learning in the LBS Program. Furthermore, this strategy noted, "An important opportunity for integrating computer-based learning into the LBS Program is distance learning through the Internet", referring to various means of extending LBS services to learners who are not able to participate in the LBS Program because of distance or inconvenient time schedules.

During 2000/01 a couple of other research projects focused on whether, and how, literacy programs in Ontario could incorporate web-based learning using AlphaRoute into their programs. Learner interviews, questionnaires, and cost-benefit analyses indicated AlphaRoute was a valuable tool to encourage learning. The participating pilot sites also provided recommendations for further enhancements and supports needed. During the same period, AlphaPlus Centre and Contact North partnered to research distance delivery of AlphaRoute and learner progress, and to explore: ways of adapting materials and providing distance learner support in isolated communities, cost-benefit relationships, and infrastructure and support requirements. Although limited by a small number of participants, results indicated learners were able to demonstrate progress. Recommendations included development of a checklist for computer system readiness and development of a recruitment and retention strategy¹¹.

Successful communication between various project stakeholders, a need for professional development, and the development of a web-based assessment tool were identified as critical elements for success throughout. Literacy Link Eastern Ontario (LLEO) was funded during the same period to develop a web-based version of the print-based resource *Common Assessment of Basic Skills*, CABS Online¹². As a separate but concurrent project, AlphaPlus contracted an external consultant (the author and developer of CABS Online) to develop a web-based initial assessment tool for AlphaRoute, now called the AlphaRoute Placement Tool. The AlphaRoute Placement Tool and CABS Online provide web-based assessment tools that enable literacy practitioners to better support learners initially; the research sites for this project used both tools.

During 2001/02 the Deaf and Aboriginal AlphaRoute sites were launched and piloted, with AlphaPlus staff acting as distance mentors, working with learners who were supported face-to-face by pilot agencies. Strong recommendations from a Deaf pilot agency to revise the activities and the site interface prompted direct work with the Deaf community to develop a new activity interface and new workforce preparation activity content. Recommendations from the Aboriginal pilot agencies included adding more culture-based and contemporary content, and more communication and numeracy activities. While recommendations also included the need for the content to reflect the range of Aboriginal cultures, linking the Aboriginal AlphaRoute site to the English AlphaRoute site was highly encouraged as a way to accommodate learner choice.

¹⁰ For more information on OntarioWorks: http://www.mcss.gov.on.ca/mcss/english/pillars/social/programs/ow.htm

¹¹ Betty, D. & Tilleczek, K. (2001). Using AlphaRoute in rural and Northern Ontario communities not served by literacy and basic skills (LBS) delivery agencies. Sudbury, Ontario: Contact North

¹² For more information on CABS online: http://www.lleo.ca/col/cabs_online.html

Web-based and phone surveys during 2002/03 were used to evaluate AlphaRoute practice. Survey results indicated practitioners supported AlphaRoute's use, but struggled with the technology requirements and support, and with the time required to learn about AlphaRoute as a resource. At the same time, another AlphaPlus research study¹³ engaged adult literacy learners using AlphaRoute in on-site programs to reflect on and share the impact learning online was having on their lives. The results of the report indicated high satisfaction with AlphaRoute as a learning environment and also indicated multiple transferable skills gained as a result of using computers to learn. In 2003 the Distance Delivery Development Project was born, the result of which is this research report. For a third time over the past seven years, the use of AlphaRoute for distance learning and flexible delivery was explored. This time the focus was broadened to view distance learning in a flexible and blended learning context, in which the AlphaRoute learning environment is but one part of a range of learning resources and supports for adult literacy learners across Ontario.

Professional Development

AlphaPlus staff were engaged in the Distance Delivery Development Project as subject matter experts for the AlphaRoute learning environment and for the use of Centra for training at a distance. AlphaPlus staff also provided training and support in blending print-based materials, websites, and software to extend and enhance AlphaRoute activities, and in addressing technical problems revealed when AlphaRoute was accessed outside of literacy program settings (from learners' homes, for example). Ways in which the distance delivery sites were supported included workshops, AlphaRoute training, and distance assessment tools training.

Workshops

AlphaPlus staff provided face-to-face workshops at the AlphaPlus Centre in Toronto throughout the project, primarily for the project coordinators of the participating literacy agencies. A limited number of workshops were also designed with the particular needs of mentors in mind. These full-day meetings encompassed a variety of workshops designed to support literacy agencies that were piloting distance delivery programming in the planning, design, implementation, and delivery stages of the project. The workshops also informed the research at the same time.

Topics ranged from distance learning models to business case development, and included orientation sessions on the research framework, the methodology, and the data collection activities, the latter of which were supported by specifically developed web-based forms. Guest speakers enriched the experience of the workshop participants on several occasions by reporting on ABE distance learning initiatives in other jurisdictions. As part of these meetings, focus groups were held at strategic times to gather information regarding the support and resource needs of the agencies in the earlier stages of the project and, in the later stages, to collect qualitative data on the experiences of project participants fulfilling various roles in the delivery of literacy programming at a distance.

¹³ AlphaPlus (2003). What difference does it make? Literacy learner perspectives on Web-based learning with AlphaRoute. Toronto, Ontario: AlphaPlus Centre. http://alphaplus.ca/images/pdf/Whatdifferencedoesitmake.pdf

Workshop topics related to AlphaRoute included: an overview of the research approach taken in the development of the learning environment from inception to the present, situating the distance delivery project within that research history; meetings with each of the agency staff to determine training, support, and resource needs as the projects started up; an introductory session about newly changed or newly developed features of the AlphaRoute learning environment; an introduction to, and training for, assessment tools; a session on blending print-based materials, software, and websites with AlphaRoute activities; and an evaluation session gathering feedback on the AlphaRoute training and support, on resource support, and on recommendations for future training and resources.

AlphaRoute Training

Agencies were given options as to how they wanted to receive training specific to the AlphaRoute learning environment. Options included self-training using the AlphaRoute training CD-ROM and accompanying support resources, live Centra training scheduled to suit the needs of the trainees, and face-to-face training in a computer lab environment at the program site. The options chosen by the agencies were determined by whether staff on site were already using AlphaRoute and could support newer mentors or not.

J'aime apprendre took a different training approach because the project coordinator at the beginning of the project had previously worked as an AlphaRoute mentor. AlphaPlus staff provided a one-day overview of information about recent changes to the Francophone AlphaRoute environment. Because the project coordinator also worked as a mentor on the project, further training was not needed. Mentors who joined the project at a later date were trained by existing project staff.

At **Kingston Literacy (CLCN)**, on-site training sessions were organized for staff in the CLCN computer lab. Two mentors and the project coordinator participated in the training, including a mentor who worked with learners in the regular on-site LBS program. This hands-on training provided the participants with an exploration of all areas of AlphaRoute. During training, participants were asked to explore and experience AlphaRoute not only from the perspectives of mentors and administrators, but also from a learner perspective. All participants were provided with material for post-training reference purposes and participated in discussions about the use and successful integration of AlphaRoute into their programs.

Sioux-Hudson Learning Centre chose to train one staff as the lead for AlphaRoute. That staff person participated in two complete live Centra AlphaRoute training sessions, one for English agencies and one for Native agencies. Other staff joining the project did self-training using the AlphaRoute CD-ROM, along with backup from the trained staff person, who sought further AlphaPlus support in learning to use Centra Symposium as a tool for reaching off-site mentors – and eventually learners – and who adapted the AlphaRoute training modules to meet the needs of trainees. Newer on-site staff used the CD-ROM for self-training.

Confederation College staff had been trained face-to-face in the past and so chose the option to self-train using the CD-ROM for a new mentor joining the Distance Delivery Development Project team. AlphaPlus staff arranged a follow-up phone session with the new mentor to answer any questions that arose during the self-training. Confederation College staff working in the on-site LBS program enhanced the training by providing a workshop for project staff on Writing Assessment.

Distance Assessment Tools Training

At the start of the Distance Delivery Development Project it was agreed a common assessment tool, the AlphaRoute Placement Tool¹⁴, which was developed in close relation with another online assessment tool called CABS Online, would be used across all four agencies. However, given that Confederation College, as a college-based LBS program, had developed their own assessment tools for the on-site LBS program, the project used the same tools to ensure comparison of the assessments within this organization was possible. One of the face-to-face workshops AlphaPlus presented to distance delivery coordinators and mentors was training on how to use both of these assessment tools. An external consultant, the developer of both tools, delivered the training in a computer-lab setting in Toronto. Both tools were developed for the Anglophone literacy stream. Staff from the Francophone distance delivery program participating in the training were not able to use either tool in their programming. The Sioux-Hudson Learning Centre program made the greatest use of CABS Online, communicating directly with the external consultant for support and guidance.

Assessment Methods and Instruments

A number of specific measurements were designed to gather data regarding program effectiveness, learner profiles, staff and student division of time, implementation issues, program acceptance in the community, and learner progress. These instruments were given to program participants and, in some cases, to a control group sample. A Common Intake Instrument, along with "Is Distance Learning for Me?" and the "Self-Management Skills Survey", provided profiles of learners entering the program. The "Learner Technical Skills Survey" and literacy skills assessment provided pre- and post-assessment measurements of learner progress both academically and in related skill areas. The rationale behind assessment of technical skills was to find if important skills associated with online and computer-based learning would also increase as learners participated in the types of distance learning used in this study. All the post-assessment instruments were given after each learner completed 100 hours of equivalent instruction, to ensure comparable ratings among learners. One hundred hours of instruction was deemed to have been met when each learner had 25 hours of direct interaction with the instructor. With an approximate 3:1 ratio of learner independent time to interactive time with the teacher, approximately 75 hours of independent work accompanied the 25 hours of direct instruction. In addition to the preand post-assessment measurements, the study also tracked how staff and students spent their time in the program. Staff and learner logs provided information on how both program staff and learners spent their time in a distance learning model. The exit interview provided insights and perceptions from students about the program as they exited the program or reached the end of an enrolment period. These instruments are summarized below. (See Appendix F, Data-Gathering Instruments.)

¹⁴See Appendix G. "AlphaRoute Features and Trial Access Information"

	ASSESSMENT SURVEYS			
Instrument	When	Who	What	
Common Intake Instrument	Intake and completion of project cycle	Learner with mentor or coordinator	Demographic dataGoal identificationSupport environmentLearning style	
Is Distance Learning for Me?	Intake	Learner with mentor or coordinator	 Support environment in program, home, community Study time and time managing skills Learning styles Motivation 	
Learner Technical Skills Survey	Intake and completion of project cycle	Learner with mentor or coordinator	Computer use (basic use, word processing, mouse/ scrolling skills, programs and files, Windows, CD-ROMs Internet skills (connectivity, browser, buttons and links, search skills, email, chat, discussion groups, online dictionaries, troubleshooting)	
Literacy Skills Assessment*	Intake and completion of project cycle	Learner with mentor or coordinator	Literacy skills assessment Learner progress in literacy skills attainment	
Self-Manage- ment Skills Survey	Intake	Learner w/ mentor or coordinator	Learning effectiveness Learner self-direction and independence Support and motivation	
Learner Logs	Weekly	Learner with mentor	 Independent learning time (print materials, videos, software/CD-ROMs, websites, self-assessment) Interactive learning time (email, AlphaRoute Café and learning activities, face-to-face mentor interaction, group chat, audio/video conference, study group, telephone) Orientation & self-reporting time (orientation, using logs) 	
Staff Logs	Weekly	Mentor, coordinator	Interactive literacy training contact hours (email, online, telephone, video conference, face-to-face learner interaction at agency or learner's home) Other contact hours with learner (intake assessment, orientation, training plan development, logging learner hours, ongoing/exit assessment, follow-up activities, learner retention strategies) Non-instructional contact hours (Lesson preparation time outreach and recruitment, technical support, counselling, management/administration)	
Site Visits and Interviews	Once during each data collection period	AlphaPlus Staff, project staff, & learners	Structured interviews to gain insights on implementation issues, successes, needed staff development and materials, local community culture, needed program revisions, et cetera	
Exit Interview**	Exit or completion of project phase	Learner with mentor or coordinator	Reasons for leaving Program strengths and weaknesses Learner goal attainment Learner progress description Future plans of the learner	

Table 5: Assessment Surveys

^{*} CLCN and Sioux-Hudson Learning Centre used CABS Online for literacy skills assessment, comparing the results of the distance learners with the selected on-site programs. Confederation College and J'aime apprendre used the assessment methods specific to their on-site programs and used the results of these on-site assessments for comparison within their agencies.

^{**} Exit assessments were given after 100 hours of instructional activities. Based on previous studies¹⁵, this threshold of 100 hours is typically achieved based on a ratio of approximately three hours of independent study to one hour of interactive time with an instructor. Therefore, assessment was administered after 25 hours of direct/interactive instruction.

¹⁵ Porter, P. and Woolley, V.M. (2004). ESL distance learning effectiveness study: Comparative study of reading score gains and program effectiveness. Los Angeles Unified School District: Division of Adult and Career Education.

Results

Data was collected using a variety of data-gathering mechanisms, which included:

- A "Common Intake Instrument" designed to collect data at the time of learner enrolment in the program
- A measurement of distance learning suitability for potential students, titled "Is Distance Learning for Me?"
- A "Learner Technical Skills Survey" to measure the degree of student proficiency in various technology skills
- Literacy skills assessments including reading, writing, and numeracy
- A learner assessment titled "Learner Self-Management Survey" designed to assess the degree of student ability to mediate their learning
- Learner logs to determine the relative amounts of time learners spent in various independent, interactive, and orientation activities
- Staff logs to measure the relative amounts of time staff spent on various tasks and duties associated with the project and to study the amount of time spent in interactive and non-instructional time with learners
- Interviews with learners and project staff conducted by AlphaPlus staff
- Exit interviews designed to gather data on learners' reasons for exiting the program
- Control group data to compare various programmatic and progress measurements with project learners

Following are study results grouped by instrument or method of gathering data.

Common Intake Results

Enrolled in Program

Students participating in the project at the four sites totalled 154.

Age

The most common age group was 27-39, with 45% of program participants falling into this age category.

Gender

Seventy-two percent of program participants were women and 28% were men.

First Language

English was the first language of 68% of the participants, 18% French (all at one site), and 14% other languages (most of which were Aboriginal languages).

Employment Status

The largest group of learners (50%) were not employed at the time of their enrolment in the program, while 38% worked full-time and 12% worked part-time. More variation between sites was noted in this measurement because one program (Sioux-Hudson Learning Centre) was predominately associated with a workplace training initiative, so most participants in that program were employed.

Highest Grade Level Achieved

The grade level achieved was divided approximately equally among three groups: grade 7-9 (28%), grade 10-12 (34%), and high school diploma (20%). A weighted average for all students showed the average grade level achieved to be grade 10.

Reason for Enrolling

The primary stated reason for enrolling was *preference to work at own pace* (30%), followed by *family obligations* (16%), *job schedule conflicts* (14%), and *trouble getting to an on-site LBS program* (12%). These percentages are not adjusted to account for the fact respondents could choose multiple reasons. Adjusting for a fixed total of 154 participants, the percentages change to:

•	Preference to work at own pace	48%
•	Family obligations	25%
•	Job schedule conflicts	23%
•	Trouble getting to an on-site LBS program	19%
•	Discomfort with traditional classroom	14%

Time Since Last Enrolled in Adult Education

The average time since participants were last enrolled in adult education was 2.3 years, assuming the response *does not apply* meant this was the first enrolment in a program, and valuing the response *greater than 5* at 10 years.

How Long Did They Attend the Last Class?

Forty-one percent of participants attended their last class for less than one year. (This was calculated based on all students, including those who did not attend a class, who were averaged in at a value of zero.) Of those who attended class (104), 62% attended for less than one year. It can be logically concluded the project served a large percentage of students who had not sustained enrolment in the past.

Currently Enrolled in Other Adult Education?

Of the students enrolled in this program, 87% were enrolled exclusively, while 13% reported enrolment in other programs. Interviews with project staff indicated almost all of this 13% were enrolled in programs having no relation to literacy.

Main Student Goal for Entering

At 49%, further training was the main goal listed by learners for entering the program. Finding a job and personal independence were next, at 28% and 23% respectively.

When these percentages were adjusted for multiple responses, the results were as follows:

•	Training/education	68%
•	Find a job	38%
•	Personal independence	31%

Level of Family/Friends Support

Eighty-three percent of participants rated their family/friends as supportive of their participation in the program, while 17% reported their family as neutral in terms of support. No students rated their family as not supportive.

Work/Study Style Preference

Working on their own was the preference of 71% of students, and 58% preferred specific direction, versus 42% preferring to figure things out for themselves. This data may point to the profile of learners who benefit most from distance learning – those who are somewhat independent and yet still need a very specific and defined program. This may mean that too much flexibility or open-endedness in a program may not be advisable.

Control Group Data Comparisons

An examination of the profiles of the project group and the control group is shown in the following chart.

INITIAL ASSESSMENT COMPARISONS			
	Project Group	Control Group	
Age	27-39	19-26	
Gender	72% women	56% male	
First language preference	68% English	85% English	
Not employed	50% not employed	77% not employed	
Average highest grade	Grade 10 level	Grade level 9.6	
Reason for enrolment	48% prefer to work at own pace	Not applicable	
Time since last class	2.3 years	1.4 years	
How long attended last	41% less than one year	42% less than one year	
Concurrent classes	13% taking another class	63% taking another class	
Learning goal	49% further training	55% further training	
Support level	83% supported by family	85% supported by family	
Study style preference	71% like to work on their own	61% like to work on their own	
Self-direction	42% try to figure it out themselves	31% try to figure it out themselves	

Table 6: Initial Assessment Comparisons

A review of the above data shows project group participants were slightly older and included a higher percentage of women than the control group. Because of the French-speaking project site, there was a higher percentage of Francophones overall in the project group than in the control group. A significantly higher percentage of control group learners were enrolled in other classes than were project participants, possibly indicating the lack of other learning and class choices for isolated students enrolling in distance learning. Again, project group learners showed higher scores on two measurements of independent learning (degree of preference to figure things out for themselves and preference to work on their own). Many other factors were similar between the control and project sites.

Is Distance Learning for Me?

Another measure designed to give potential learners feedback on the advisability of their enrolment in distance learning programs was an instrument termed "Is Distance Learning for Me?" The results of this survey are presented below.

Importance of Face-to-Face Interaction with Instructor

Eighty-seven percent of participants indicated it was important or somewhat important to interact with the instructor face-to-face. This data, along with data from other studies of distance instruction, points to the importance of maintaining some degree of personal interaction between student and teacher. When this interaction is not maintained, enrolment often begins to fall in distance learning programs.

Importance of Classroom Instruction

Fifty-six percent of learners responded that classroom instruction is almost always helpful.

Directions

Seventy percent of learners preferred first trying to follow directions themselves and then asking for help. This supports the tentative conclusion above regarding maintaining some degree of student-teacher personal interaction.

Need Reminding About Assignments

Eighty-eight percent of participants reported rarely or sometimes needing reminding. Only 12% reported needing reminding often. This would suggest monitoring methods do not have to be any greater than in traditional programs, as the physical presence of a teacher appears to make little difference to this factor.

Amount of Study Time per Week

A great deal of variability was noted in responses to the question about study time per week. The standard deviation was 2.04 hours per week. The adjusted average was 4.7 hours per week.

Feelings About Computers and Technology

Most learners (85%) either reported knowing something about computers and wanting to keep learning, or enjoying using technology and wanting to keep learning. This points to the possible conclusion that the experience of using and learning more about technology is a motivating factor in enrolment.

Organizational Skills

Forty-eight percent of learners reported average organizational skills.

Importance of Taking the Course

Ninety-six percent of students rated taking the course as important or very important.

Support of Family

Eighty-six percent of learners reported that their families were excited and supportive, or somewhat supportive. This is consistent with the intake instrument results, which indicated 83% fell into similar support categories.

Place to Study

Results were mixed when learners reported on having a place to study; 33% had their own study place, 22% had a quiet place to study, and 36% sometimes had a place with some interruptions. This may point to the need for more emphasis on study locations during recruitment and orientation.

Computer and Internet Access

Sixty-three percent of students had a computer in their home and 54% had Internet access.

Comparison of Distance and Control Group Learners in Distance Learning Suitability

This data includes the larger control group sample of learners in classroom settings at one site. Note that the chart excludes data pertaining to the importance of taking a distance course as it doesn't apply to the control group.

DISTANCE LEARNING SUITABILITY COMPARISONS				
	Project Group	Control Group		
Importance of face-to-face with instructor (Important or Somewhat important)	87%	100%		
Importance of classroom instruction (Almost always helpful)	56%	57%		
Directions preference (Trying to figure things out first and then asking for help)	70%	68%		
Need for reminders about assignments (Rarely or Sometimes)	88%	94%		
Study time per week (hours)	4.7	5.7		
Feelings about computers and technology (Enjoy using or Want to keep learning)	85%	79%		
Organizational skills (Having "average" skills)	48%	43%		
Importance of taking distance course (Important or Very important)	96%	n/a		
Support of family (Excited and supportive or Somewhat supportive)	86%	78%		
Place to study (Own place or Quiet place)	55%	40%		

Table 7: Distance Learning Suitability Comparisons

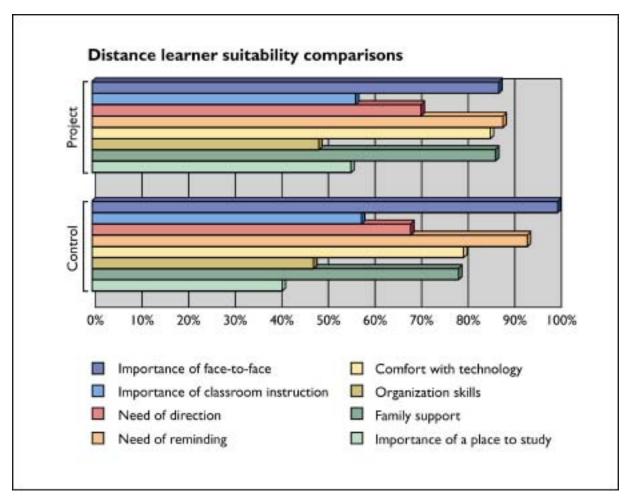


Chart I: Distance Learning Suitability Comparisons

Although other factors may account for interpretations of differences between project and control group data, several trends can be seen. The two groups were quite similar in profiles of learners enrolling. Most differences noted were likely due to geographic, program emphasis, and socio-economic regional differences, rather than to differences in types of learners choosing to pursue distance learning as their instructional option. The traditional classroom group (control group) rated face-to-face instruction as more important, and also valued more highly the need for reminding about assignments. The project group was slightly more comfortable using technology and had more affirmative responses on the level of support from their families and on having a location to study. These differences are consistent with factors relating to learner independence and are therefore worthy of further study.

Technology Skills

This project was interested in whether learners' technology skills would grow as a result of using the various technologies associated with distance education and flexible learning. The project was also interested in the availability of computers and Internet in the home and whether this availability had any effect on student success in the program.

Computer and Internet Access at Home

Sixty percent of learners had a computer at home at the start of the project, and 54% had Internet access. These questions were a good validity check when compared with the same question in the intake survey, which showed that 63% of students had a computer in their home and 54% had Internet access (almost identical responses). Post-assessment data indicated an increase of 14% in these figures, averaged across all of the four technology use measurements. In addition to home usage, 80% of learners had computer access outside the home and 77% had Internet access outside the home.

DISTANCE LEARNER COMPUTER AND INTERNET ACCESS			
	Pre-Assessment Post-Assessment		
Have a computer at home	60%	73%	
Have Internet access at home	54%	67%	
Know how to use voice mail	62%	76%	
Know how to use fax	67%	84%	

Table 8: Distance Learner Computer and Internet Access

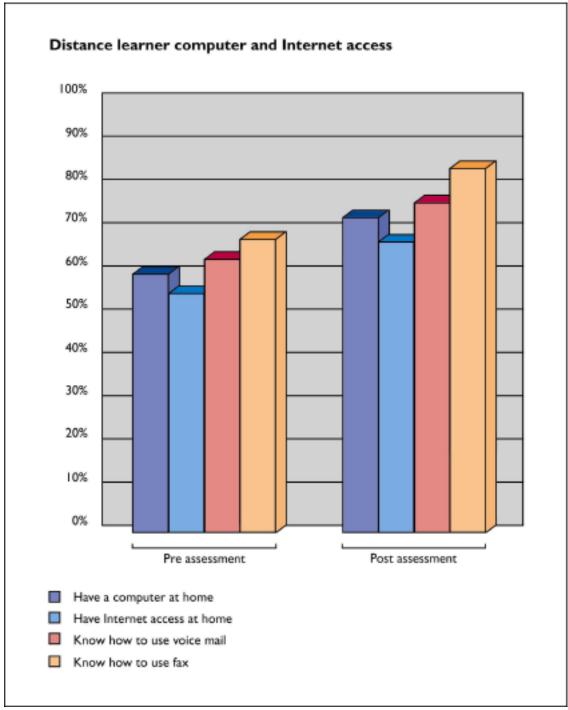


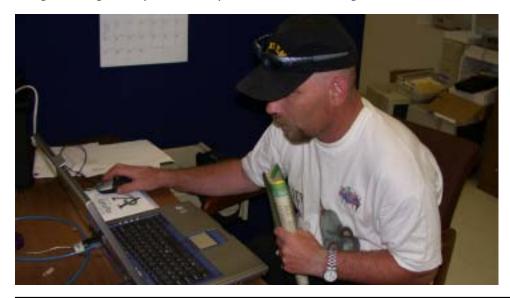
Chart 2: Distance Learner Computer and Internet Access

Specific computer skills were assessed in the body of the survey instrument. Pre- and post-assessment¹⁶ are represented in weighted averages based on the Likert Scale. With a 5-point scale, the 3 rating is right in the middle, indicating neutrality and serving as a standard point of comparison.

DISTANCE LEARNER TECHNOLOGY SKILLS (WEIGHTED AVERAGE)			
	Pre-Assessment	Post-Assessment	
Start up	3.12	3.72	
Keyboard/mouse	3.06	3.57	
Using CD-ROMs	2.62	3.10	
Handling problems	2.10	2.36	
Windows	2.74	3.21	
Launch programs	2.88	3.36	
Launch program features and files	2.71	3.23	
Internet connectivity	2.63	3.17	
Web browser	2.53	2.96	
Email	2.51	2.93	
Interactive communications tools	2.51	2.00	
Overall	2.63	3.06	

Table 9: Distance Learner Technology Skills (Weighted average)

The change in pre- to post-assessment technology skills showed an average gain of .43 on a four-point Likert scale. This represents a 16% skill gain on the part of learners in technology skills. The skills showing the most significant gains were start up, keyboard/mouse, launch program features and files, and Internet connectivity. The drop in the use of interactive communication tools may be due to learners being encouraged to try out a variety of tools before settling on the ones that best suited their needs.



¹⁶Pre- and post-assessments were administered before and after "instructional hours" totals of 25 hours for distance learners, and 100 hours for onsite learners. See "Assessment Methods and Instruments" for more information.

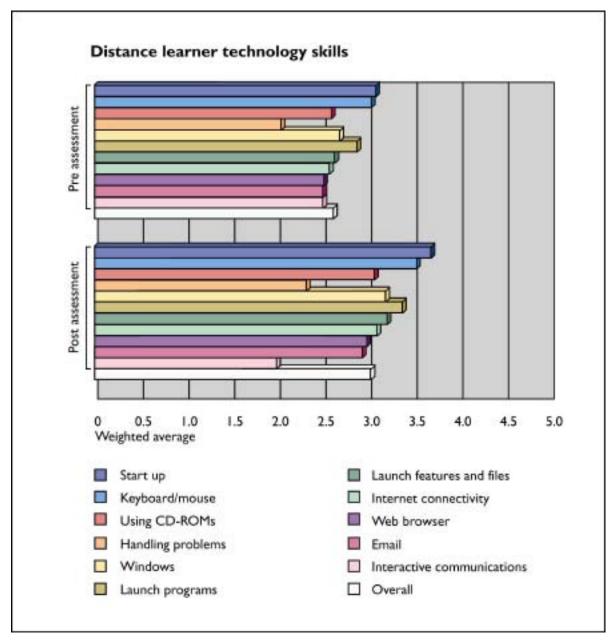


Chart 3: Distance Learner Technology Skills

Control Group Data

CLCN collected control group data for technical skills pre- and post-assessment scores. The attrition rate at this site was 50%, as the number of pre- and post-assessment learners surveyed went from twelve to six. This sample was of relatively small size, so any conclusions should be viewed with that in mind.

CONTROL GROUP LEARNER COMPUTER AND INTERNET ACCESS				
	Pre-Assessment	Post-Assessment		
Computer in the home	25%	17%		
Internet access in the home	25%	17%		
Know how to use voice mail	92%	100%		
Know how to use fax	42%	33%		

Table 10: Control Group Learner Computer and Internet Access

CONTROL GROUP LEARNER TECHNOLOGY SKILLS (WEIGHTED AVERAGE)				
Skill	Pre-Assessment	Post-Assessment		
Start up	2.58	3.17		
Keyboard/mouse	2.33	3.00		
Using CD-ROMs	1.58	2.67		
Handling problems	1.30	1.83		
Windows	1.92	2.83		
Launch programs	1.83	3.17		
Launch program features and files	1.92	2.83		
Internet connectivity	1.83	2.83		
Web browser	1.75	3.17		
Email	2.25	2.50		
Interactive communications tools	1.25	2.17		
Overall	1.87	2.74		

Table 11: Control Group Learner Technology Skills (Weighted average)

Literacy Skills Assessment

The most popular method for doing learner literacy skills assessments was face-to-face (48%), with great variation (from 97% to 20%) for that method among the sites.

Number of Direct Contact Instructional Hours

Students spent a total of 1,716 hours across all sites in direct contact with their teachers. With 145 students in total, the average was 11.8 hours per student. This data was collected over the course of eight months.

Reading Level Gains

The weighted average of student reading level scores at program entry was LBS level 2.78. The weighted average of exit (post-assessment) reading level scores was 2.93.

The average gain in reading levels was .15.

Writing Level Gains

The weighted average of student writing level scores at program entry was LBS level 2.45. The weighted average of exit (post-assessment) writing level scores was 2.65.

The average gain in writing was .20.

Numeracy Level Gains

The weighted average of student numeracy level scores at program entry was LBS level 2.34. The weighted average of exit (post-assessment) numeracy level scores was 2.36.

The average gain in numeracy was .02.

It is surmised that the minimal gain in numeracy resulted from the major emphasis of the program being on literacy. Also, there were not as many numeracy activities provided in the materials used or in the programs operated. As well, much of the material for numeracy is not written for literacy learners and therefore is not best suited to the population of this study.

Control Group Comparisons

Given that the control group data collection was not concluded at the time of data analysis for this report, the results from two sites are presented below for study and future direction.

Despite a sufficient number of learners in the control groups at CLCN and another program also part of Kingston Literacy, only a small number of those learners qualified for post-assessment of literacy skills. Results based on such a small sample are inadequate to make any definite conclusions. The numbers below represent progress made within LBS Levels 1-5, based on assessments done with CABS Online¹⁷.

Reading levels

Pre-assessment	$37 \div 15 = 2.47$
Post-assessment	$11 \div 4 = 2.75$

Writing levels

Pre-assessment	$28 \div 15 = 1.87$
Post-assessment	$7 \div 4 = 1.75$

Numeracy levels

Pre-assessment	$26 \div 15 = 1.73$
Post-assessment	$11 \div 4 = 2.75$

Confederation College reported on learner progress based on evaluation of progress sheets that worked in conjunction with biweekly planners, both of which also were adapted for distance learners. The percentages below represent progress toward mastery of specific learning goals within one literacy level, evaluated through demonstrations of associated skills.

Reading	Writing	Numeracy
50%	38%	47%

¹⁷ For more information on CABS online: http://www.lleo.ca/col/cabs_online.html

Self-Management Skills

Adapted from a survey used in a previous research project¹⁸ conducted by AlphaPlus, a survey questionnaire was developed to measure learner perceptions of their own skills and abilities to manage their learning. This Self-Management Survey was completed by each project student, and by the control group students. Results for the project and control groups are displayed below.

SELF-MANAGEMENT COMPARISONS						
	Well Fair		Poor			
Abililty	Project	Control	Project	Control	Project	Control
Stay focused	35%	27%	57%	58%	8%	15%
Stick with task	41%	31%	52%	69%	7%	0%
Figure things out yourself	41%	31%	55%	62%	4%	8%
Ask for help	64%	77%	30%	19%	5%	4%
Make decision	51%	65%	45%	19%	4%	15%
Solve problems	36%	35%	55%	58%	8%	8%
Accomplish things	51%	50%	41%	46%	8%	6%
Organize	42%	38%	52%	46%	6%	15%
Learn things on own	44%	31%	50%	58%	6%	12%
Manage your own time	36%	31%	53%	54%	10%	15%
Evaluate own progress	27%	12%	60%	62%	14%	27%
Try and learn new things	63%	58%	34%	42%	3%	0%
Learn without help	25%	15%	64%	69%	12%	15%
Accept responsibility	65%	69%	29%	31%	9%	0%
Seek constructive criticism	46%	27%	42%	62%	12%	11%
Try new things	59%	62%	36%	38%	5%	0%
Average	45.4%	41.2%	47.2%	49.6%	7.3%	9.4%

Table 12: Self-Management Comparisons

¹⁸ AlphaPlus (2003). What difference does it make? Literacy learner perspectives on web-based learning with AlphaRoute. AlphaPlus Centre, Toronto, Ontario. http://alphaplus.ca/images/pdf/Whatdifferencedoesitmake.pdf

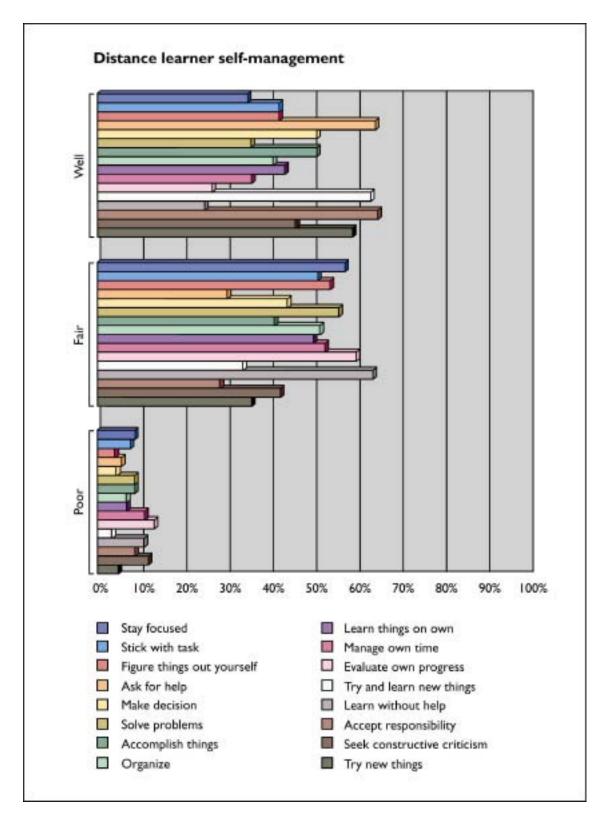


Chart 4: Distance Learner Self-Management

Comparisons to Control Group Data

Distance learners rated higher in ability to ask for help, to learn new things, and to accept responsibility. Project learners scored higher in twelve of the sixteen measurements of self-management, indicating a trend of distance learning students having slightly higher levels of self-management.

Learner Logs

Independent Learning Hours

Independent learning time was defined as time spent by learners on various learning activities without any direct contact or direction from the teacher. The division of time spent by project learners in independent learning activities using various media can be seen in the following table. With the exception of the percentages of time spent learning on the website and with software, the ratios of time spent on various media were similar between project and control group learners.

INDEPENDENT LEARNING HOURS			
	Project Group Control Group		
Print	29%	34%	
Video	< 1%	1%	
Software	7%	16%	
Web-site	8%	1%	
Self-assessment	3%	1%	
AlphaRoute	15%	13%	
Total	62%	66%	

Table 13: Independent Learning Hours



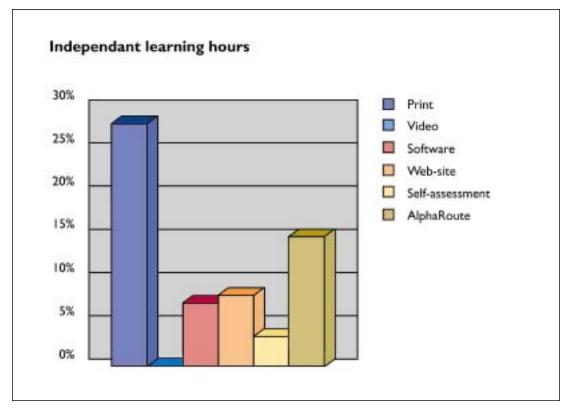


Chart 5: Independent Learning Hours

Independent learning activities for distance learners consisted primarily of using print media and AlphaRoute.

Interactive Learning Hours

Interactive learning time was defined as time spent by learners interacting with their instructors or with other project staff.

INTERACTIVE LEARNING HOURS				
	Project Group	Control Group		
Email	4%	3%		
AlphaRoute Café	1%	0%		
Face-to-face	20%	13%		
Chat group	1%	0%		
Audio/video conference	0%	1%		
Study group	1%	13%		
Telephone	2%	0%		
Total	29%	30%		

Table 14: Interactive Learning Hours

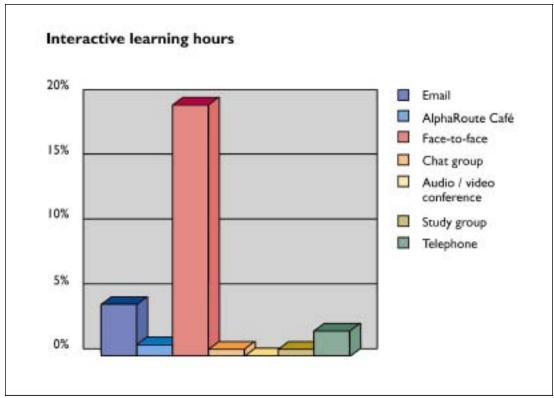


Chart 6: Interactive Learning Hours

The largest portion of interactive learning was face-to-face interaction with instructors or tutors. Percentages of interactive time for the control and project groups were quite similar, with the exception of significantly greater study group time for the control group.

Orientation, Self-Reporting, and Administration Hours

Time spent by learners in orientation, self-reporting, and administration was tracked separately because this time did not fit into the independent or interactive learning hours categories. This data was gathered to gauge the amount of learner time necessary for orientation activities, because these activities have been reported as important in other projects that experimented with distance learning and use of technology, or with other alternative learning strategies. The majority of this time was spent in student orientation, traditionally a very important activity with distance learning, in which learners are expected to use and gain comfort with alternative forms of communication and assessment, and with various tools associated with the distance education process. Project learners spent approximately six times more hours in orientation than did their control group counterparts.

ORIENTATION, SELF-REPORTING, AND ADMINISTRATION LEARNER HOURS				
	Project Group	Control Group		
Orientation	6%	1%		
Self-reporting	4%	2%		
Administration	<1%	0%		

Table 15: Orientation, Self-Reporting, and Administration Learner Hours

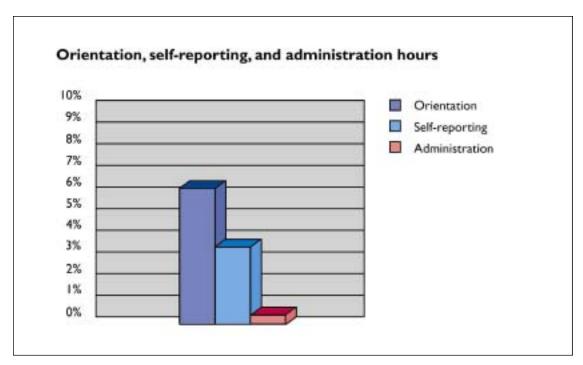


Chart 7: Orientation, Self-Reporting, and Administration Hours

Of the total time spent on these activities, 6% was spent on orientation and 4% on reporting by students. Significantly less time spent on each of these activities was noted in the control group (1% and 2% respectively). This points to the need for increased extensive orientation activities in distance learning projects.

Staff Logs

It must be noted that in the beginning stages of a pilot project, it takes a period of time to achieve consistency and reliability in how staff track their hours. For instance, staff may take a period of time to learn how to code their time spent and may need to refine definitions of time spent. In addition, in the early stages of a project, a great deal more time must be spent in management and administration while the program is being formulated and developed.

There were 8,055 total staff hours reported for the duration of the project, which operated for eight months. With four sites involved in the project, the average came to about 252 hours of reported staff time per site per month.

Interactive Staff Hours

Interactive hours were defined as time spent by learners directly interacting with their instructors. These hours were divided into several modalities as listed below, showing the percentages of staff time taken for that activity.

INTERACTIVE STAFF HOURS				
Activity	Project Group	Control Group		
Email	4%	1%		
On-line On-line	4%	0%		
Phone/video calls	4%	< 1%		
Home (face-to-face)	3%	1%		
Agency (face-to-face)	10%	48%		
Learner observation	1%	7%		

Table 16: Interactive Staff Hours

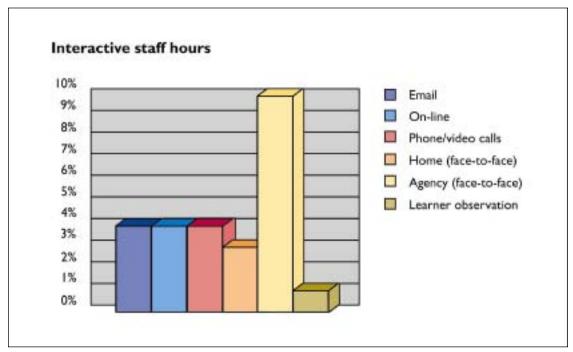


Chart 8: Interactive Staff Hours

The majority of interactive hours spent by staff were spent in face-to-face interactions with learners. Phone, online, and email contacts were all approximately the same percentage of interactive hours.

Interactive Non-Instructional Staff Hours

Other contact hours with learners were defined as staff time spent in contact with learners but not in a direct teaching manner. Intake assessment and orientation represented the highest percentages of interactive non-instructional hours between staff and program participants.

INTERACTIVE NON-INSTRUCTIONAL STAFF HOURS COMPARISONS			
Activity	Project Group	Control Group	
Intake assessment	5%	2%	
Orientation	3%	< 1%	
Training plan development	2%	1%	
Logging hours	2%	< 1%	
Assessments	2%	1%	
Follow-up	2%	< 1%	
Learner retention activities	2%	1%	

Table 17: Interactive Non-Instructional Staff Hours Comparisons

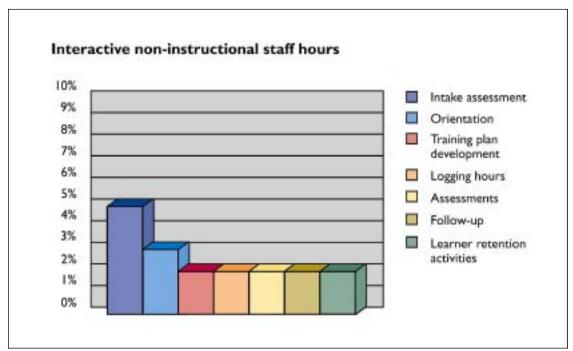


Chart 9: Interactive Non-Instructional Staff Hours

Non-Interactive Staff Hours

Non-interactive staff hours represent the time spent by staff in activities that did not involve either direct or indirect contact with students. Non-interactive time for distance learning was most commonly spent in management/administration, followed by lesson preparation.

NON-INTERACTIVE STAFF HOURS COMPARISONS				
Activity	Project Group	Control Group		
Lesson preparation	10%	23%		
Outreach/recruitment	5%	<1%		
Staff development	7%	1%		
Staff support	3%	1%		
Travel	7%	2%		
Management/administration	23%	7%		

Table 18: Non-Interactive Staff Hours Comparisons

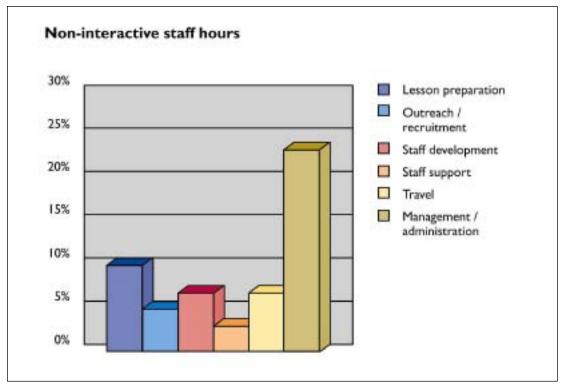


Chart 18: Non-Interactive Staff Hours

Staff Time Comparisons Between Project and Control Groups

As expected, control group staff spent much more time in face-to-face interaction with learners (approximately fives times as much) than did project staff. Also as expected, project staff spent more than seven times the amount of time in media-related interactive hours (email, online, and phone/video calls) than did control group staff. Other contact time spent with control group learners was almost three times greater than other contact time spent in the distance learning environment. Interestingly

enough, control group staff spent more than twice as much time in lesson preparation and less than one third of their time in management activities. Interviews with project staff indicated the greater time spent in management was due to early commitments of time for organizing and running a new program that was significantly different than traditional programs.

On-Site Visits

During the first data collection phase, AlphaPlus staff visited each project agency to gain an understanding of the contexts within which the pilot sites operated, in terms of target populations, learner backgrounds and characteristics, community cultures and demographics, practitioners and support staff, unique challenges, and other factors, so the data gathered and the accompanying research could be placed in a meaningful context for better analysis. Learners were interviewed about reasons for enrolling, challenges and successes, and how their program addressed their needs.

Start-up issues, communications, and data-gathering issues were addressed with project agency staff at each pilot site, in addition to learning about the needs of learners, pilot sites, project agencies, and their respective communities.

The on-site visits allowed AlphaPlus staff to understand the context of the data being gathered and to orient each project agency to the goals and methods of the research project as a whole. Without these visits, the data would have been looked at in a very general and generic sense without respect for the unique circumstances of learners and their communities.

Exit Interview

Exit interview results must be viewed cautiously. Most of the exit interviews were at the end of a program cycle and the learner was not planning to leave the program permanently. In fact, the end of a program cycle was given as the reason for leaving in 73% of the cases. Exit interviews were conducted with as many students as possible at the conclusion of the program cycle in January. In the future, it is recommended to have a separate and different exit interview for students who leave the program on their own accord. Of the students not reporting "other" reasons (that is, end of program cycle), the primary reason for leaving was successfully reaching their learning goal. This reason was reported by 12 out of 24 students, or 50% of those not reporting "other".

Exit interviews for control group subjects were inconclusive at the time of this report.

Project Site Funding

Financial Support

As a pilot project and study sponsored jointly by National Literacy Secretariat (NLS) and the Ministry of Training, Colleges and Universities (MTCU), the four project agencies and AlphaPlus Centre received funding to operate and support distance and flexible delivery of Literacy and Basic Skills (LBS) programming and to conduct field research. Further funding was provided by MTCU to the two agencies setting up control groups.

Due to the pilot nature of this program, the necessary extended start-up and development time, and the time required to secure and train staff and to recruit students, extensive study of financial data and examination of issues such as "cost per learner" did not make sense. These types of issues can be better dealt with at the next stage of the project, when grants can be based on certain expected levels of performance or numbers of learners served.

All project agencies found that not being able to spend project funds on capital purchases was difficult, because it was not possible to purchase computers for their learners, for instance. Also, there was not sufficient funding to cover the travel expenses and travel time for project staff required to assess and support learners in rural and isolated communities. As this represents a potential argument for increased future funding, recommendations relating to these issues can be found in the Recommendations section.

In-Kind Contributions

In addition to project funds received by each agency, other funds or contributed in-kind funds were also sought to assist in the development and delivery of each agency's distance program. Further revenue consisted of limited corporate sponsorships and extensive in-kind contributions from within the agencies and the targeted communities. In-kind contributions were comprised of staff time from staff within the same agency or from other organizations within the community, as well as time spent by project stakeholders participating in advisory committees.

Corporate sponsorships from IBM Canada and Bell Canada included the donation of computers and printers, as well as a small grant, all provided to Kingston Literacy (CLCN).

In-kind contributions at the Sioux-Hudson Learning Centre were generally provided by organizations within the target communities that could see a benefit from the project. The use of local classrooms, computers, and Internet connections was often insufficient due to the lack of high-speed Internet access.

At Confederation College, in-kind services were provided through the college for the technical development of a web-based application and for support to the control group study involving 60 on-campus learners and a number of instructors.

Successes and Benefits

Each project agency was asked to provide details of the successes within the context of each pilot site and of the benefits achieved by the project as a whole. Following are summaries of some of the comments from each site on this topic.

Centre de formation pour adultes J'aime apprendre inc.

The distance delivery program at J'aime apprendre viewed the retention rate of 76% among the participating learners as encouragement to continue a program that has allowed for literacy skills development in a self-directed fashion. Implementing a flexible program that could respond to the needs of learners differing in terms of age, literacy level, and personal and professional circumstances was a success. Also, the development of appropriate materials and the acquisition of literacy and technology skills could be viewed positively. Recognition of the program in the community should help to attract other local literacy organizations; sharing the experiences of developing this program should help improve the services in the community.

Kingston Literacy (CLCN)

CLCN counts the building of partnerships within the community and working toward better Internet connectivity among the great successes of the distance program. Developing and maintaining partnerships with other organizations in the community, such as OW, public schools, and local businesses, was a primary focus of the agency from the beginning of the project. As a result, the agency has been recognized by those other organizations as a major contributor to the development of services and supports provided to community members in Napanee, Tamworth, and Kaladar. Successful

partnerships were also formed with local business partners and regional sponsors, such as IBM and Bell. A local newspaper publicly acknowledged the success of the program.

Computers were a great motivating tool for the learners in this program because continued participation assured learners of having computer and Internet access from their homes for themselves and their families. With the support of project staff, students learned how to maintain this equipment in good order and how to apply basic troubleshooting techniques such as deleting unnecessary files. These techniques were especially important for better Internet connectivity in rural areas where only dial-up access was available. Also, it was discovered that external hardware modems were superior to internal software modems in establishing and maintaining faster dial-up Internet connections. A major benefit of this program was that learners were able to truly work at their own place and pace.

Sioux-Hudson Learning Centre

Having a mentor and scheduled hours each week for learners to drop in at the Hudson pilot site and connect with the mentor worked well. This model seemed to help the lower LBS level learners stay in an adult literacy program. The initial start-up period of the program was longer than anticipated, but most learners became very motivated and started recording more hours. Learners who began by averaging five hours per week increased their program participation to approximately twenty hours per week. Most encouraging was the progress learners made in literacy and in gaining more independence.

The First Nations Management Training (FNMT) group agreed to use textbooks recommended by the Sioux-Hudson Learning Centre and purchased those books. The work-related learning environment created by the FNMT group complemented this project agency's distance learning model very successfully. Students were working independently with support through phone, fax, text messaging, and Centra. Fifteen learners finished the numeracy skills review and participated in introductory business math training with the remaining learners in this group. Later on in the program, 24 students opted to participate in the English language modules.

Confederation College

Flexible learning opportunities were provided to individuals who otherwise might not have accessed training for a variety of reasons, including scheduling and transportation issues, distance, personal learning preferences, and family or work-related responsibilities. Many learners indicated that the flexible nature of the program provided them with the opportunity to fit learning around their schedules and to develop their skills while fulfilling other commitments. As well, several learners, although initially lacking the skills needed to participate fully in the program, gained not only transferable computer skills but also the self-confidence needed to work independently on activities.

Community facilitators played a valuable role in promoting the program and in conducting outreach and recruitment activities. The establishment of a computer lab/drop-in facility at the Ontario Works Employment Resource Centre in Thunder Bay provided an additional opportunity for Ontario Works (OW) clients who were either reluctant or unable to participate in the on-campus program. A range of community contacts and potential partnering opportunities were explored and developed. Continued interest in the program was evident both through referrals and through word of mouth.

Both as a learning approach and as a web application, the LBS Distance Delivery Resource Toolbox allowed teachers/mentors to draw on a range of learning resources, materials, and activities and to develop customized and integrated learning opportunities. The Toolbox also provided a framework for

addressing variances in learning styles and preferences; most learners indicated satisfaction with the combination of AlphaRoute and other online and print resources. A range of learning resources for mathematics was incorporated into the program, including online sites, texts, Confederation College booklets (in PDF format), and instructional video software.

Lessons Learned and Strategies

Sites were asked to provide a list of lessons learned about, and strategies for, providing distance adult learning, in the hope that sharing this information could inform improvements to existing and future programs.

Staff and Learner Recruitment

- Word of mouth and walk-ins were important sources of referrals, particularly in rural communities operating programs.
- Program recruitment strategies included flyers, inserts in local papers, radio advertisements, use of
 community facilitators, word of mouth, walk-ins, posters, open houses, door-to-door campaigns,
 local workshops, and follow-up with key contacts.
- Mentors needed to be thoroughly trained in all aspects of assessment and AlphaRoute. This training
 must go beyond just overviews and must include hands-on practice and application.
- Having a community insider or local "literacy champion" was very advantageous.
- Multiple sources of referrals needed to be cultivated in the local community and with other agencies. Use of community facilitators was a good strategy for engaging local community members.
- Learner retention was more of a challenge than recruitment.

Intake and Orientation

- Over-the-phone intake was a successful strategy.
- Extensive program orientation was necessary. Orientation needed to be longer and also included computer classes so that all learners came to the project with adequate basic computer skills.
- Orientation modules were developed that could be offered at any time during the program, both for new learners and for continuing learners who wished to upgrade their skills.

Program Operation

- With extensive assessments upon enrolment, the time before getting to initial learning assignments may have been too long and may have discouraged some participants from continuing the program.
- Providing flexibility and variety in the program were key strategies.
- Having adequate infrastructure in place at the start of the program was important.

Challenges and Setbacks

Project agencies were also asked to provide a list of challenges and setbacks they experienced during the course of the project.

Centre de formation pour adultes J'aime apprendre inc.

Learners at this project site were faced with challenges due to low interest in math, difficulties working from home because of a lack of self-management strategies, unforeseen work- and family-related circumstances, and learning disabilities. Due to difficulties at the agency level in sustaining funding for several months during the project term, co-operation with AlphaPlus was interrupted; however, distance program delivery was continued as planned.

Kingston Literacy (CLCN)

Challenges for the distance program included the need for more comprehensive AlphaRoute training, finding resources to supplement AlphaRoute activities, providing computer skills training for learners, building a community of learners, motivating learners to keep to their goals, working within the time constraints of available staff hours, and technology-related issues such as Internet connectivity. A further challenge presented itself in doing the control group research with regard to coordination between the two participating on-site program sites, which were both included in the data collection in order to provide data from a sufficient number of control group participants.

Sioux-Hudson Learning Centre

Challenges included the loss of staff at critical times, which caused problems with program continuity; acquiring high-speed Internet; large numbers of phone calls made to reach twenty learners in the FNMT group; web-based data collection that was hindered by unstable dial-up access; coordinating three distinct pilot sites; and the lack of funding for capital purchases, which necessitated renting computer labs.

Confederation College

Some initial challenges encountered included developing the LBS Distance Delivery Resource Toolbox and identifying and integrating appropriate resources for different levels. At the Kenora campus, several learners required extensive time up front to develop their computer and self-management skills before participating fully in the program. Levels of participation and commitment to the program varied significantly; factors and variables that may have affected participation at different sites were identified and valuable lessons were learned. Other challenges included ensuring computer access and modifying delivery approaches.

Recommendations from Sites

Sites were asked to provide some of their recommendations regarding distance adult learning. Some of these recommendations are noted below:

- Provide more initial career exploration, and provide aptitude testing and guidance counselling.
- Spend more time on initial community set-up with computers, Internet, space, contacts, and mentors.
- Ensure community support, especially through the use of a community literacy champion.
- Continual contacts and updates with on-site mentors are critical. Clarify project requirements like the
 entry and exit of learners and other time frame requirements. Develop agreements with communities
 to promote ownership and engagement.
- Expand program orientation to include intensive initial and ongoing career and self-management workshops.
- Develop a two- to three-week pre-screening program comprised primarily of self-management and interpersonal communication activities as a tool both to develop essential skills and to determine learner readiness for the program.
- Develop an enabling/step-up program to assist learners not possessing certain skills sets. As a precursor to the distance learning program, such an enabling program should involve scheduled classes in self-management, basic computer skills, goal setting, and career exploration.
- Balance access to flexible learning opportunities with screening learners and determining learner preparedness for the program.

- Realize that although flexible learning provides opportunities for individuals who might not
 otherwise access LBS programming, regular participation becomes an issue for some. There are
 challenges inherent in maintaining motivation at a distance and in the lack of informal support
 structures associated with the classroom environment; frequent contact and follow-up are required.
- Develop long-term efficiency and sustainability, particularly when there are costs associated with distance sites.

Case Studies

Case studies often provide the most valuable research information in that they give evidence of the unique circumstances of literacy programs and their learners. The following is a selection of case studies provided by the project agencies. Please note that the names in the case studies are not the actual names of project participants involved.

Case Study 1

Mary is from a small community of under 500 people and she walked into the literacy agency's office to ask if they knew of any place or anyone that could help her learn to read and write. For years, Mary had worked washing dishes and making beds in hotels. When told that she could start with some materials and that there was free tutorial help, she actually had tears in her eyes. She said, "You've given me hope. After five years of looking I thought there was no hope. You've given me hope!" When told that a similar access site would be available in her community of Hudson, through the Good Learning Anywhere model, she was excited that she would not have to try to find rides. Mary was ecstatic to find out the mentor was an old childhood friend. Although having only five words she could sight-read, she already had a computer at home and was interested in using the Internet; access to the Internet had been her side interest. Mary concentrated on learning with CD-ROMs that allowed her to use and expand her word base and challenged her in math. She did not do a lot of math at home and was at the drop-in location every hour it was open. Mary spent fifteen to twenty hours a week working on the computer and on various materials given to her.

Case Study 2

Danielle entered the program in September 2004 and demonstrated enthusiasm and determination in completing her assignments in spite of the many difficulties she encountered, while at the same time maintaining a home for her two children. The distance program afforded Daniellee a unique opportunity to work toward enrolling in a post-secondary program at the same time. As of January 2005, she was working toward the completion of LBS Level 3 communications and numeracy, she had become more confident in her ability to complete assignments successfully, and she had begun considering options in post-secondary education. Following are Danielle's comments:

"I enrolled in the Literacy and Basic Skills Distance Delivery Program in September 2004. I have really enjoyed the program. It lets me do the work at home which is great for me as I have two children I raise on my own and also work part-time. I like checking in once a week and handing in my work. I find by doing this it gives me incentive to accomplish my assignments. I love the AlphaRoute assignments very much. I find them fun, interesting, and educational. I have recently had hand surgery and worry I will fall behind. I am still doing my assignments as best I can, considering I have limited use of my right hand. I am proud I have committed myself to this program and look forward to continuing my education. In the future I plan to take the Teacher's Aide [program]."

This is a letter Danielle wrote to her mentor:

Dear Mr. G.,

Two positive things that have happened to me in my life are my children and returning back to school.

Raising children is one of the most toughest jobs a person can face. I enjoy being a positive role model for my children. Although raising children involves a lot of trial and error, I believe as long as you are there for children by showing them love, respect, and teaching them right from wrong, they will grow up to be responsible caring loving human beings.

Returning back to school has also showed my children that even though you sometimes make the wrong choices in life, it is never too late to go back and correct those choices. I am teaching my children just how important an education is. I want them to see me struggle with keeping up with work, raising them as a single parent, and making time for my schoolwork. I feel this is a strong life lesson for them. I am hoping it is showing them to stay in school as it is so much harder to go back and complete your education when you are older and have a job and kids. I also want them to be proud of me for returning back to school and wanting to complete my education.

I want to teach my children that no matter who you are, how old you are, or where you come from, nothing is impossible. If you set your mind to it anything you want is within reach.

Danielle

Case Study 3

Catherine never used a computer prior to entering the program. She began to spend more than 25 hours per week at the computer working on her program. She was passionate about her studies and had good working habits, including noting all of her visits. Catherine asked for many exercises to practise and became a tutor for friends who could not take the course.

Case Study 4

Richard began the distance learning program in September 2004. Although he had applied to the on-campus LBS program, his job and his financial responsibilities prevented him from attending classes at the college. The flexible nature of the LBS distance learning pilot afforded Richard an opportunity to study according to his schedule. In addition to being highly motivated, he had computer and Internet access at home. He wanted to develop the skills necessary to succeed in future post-secondary studies and was considering several post-secondary opportunities. From September 2004 to January 2005 Richard participated actively in the program and made excellent progress toward achieving his immediate educational goals. As of January 2005 he was still enrolled in the program and was nearing completion of LBS Level 3 preparatory activities and demonstrations. Following are Richard's comments:

"The mentor has been more than I could ask for. He has been a great influence on giving me the drive and confidence to continue and has made me feel I can accomplish my goals. I really have no other support except myself trying to believe I can make this happen. So far, the program has been great for the reason of convenience. The hours are very flexible to give a guy the chance to go make some money in order to pay some bills. My goal in taking this program is to give myself the chance to go back to school and pursue a career that I will enjoy the rest of my life. The activities in AlphaRoute I would say are the strengths of the program as well as the mentor support. The instructions in AlphaRoute are easy to follow and understand. It's also good to have different types of activities [print and online]. All aspects of the program have been good. The activities and the mentor have been the main aspects for me."

Case Study 5

Paul made tremendous gains in many areas of his life. His progress also had an effect on his son and their relationship. Letters have been provided from other agencies to attest to Paul's desire to complete grade 12. As of January 2005, he was in the process of determining the credits he required to reach his goal. Paul's involvement with the distance project not only had an impact on him but also on the community. He is now volunteering at his son's school and has brought others into the distance program. Paul and his son are no longer in counselling and his son is no longer in a special class at school. The following is Paul explaining why he wanted to be part of this program:

Case Study 6

Elizabeth began the program in late September 2004. As a mother of two (she gave birth to her second daughter in December), she had not previously considered classes in an LBS program, due to daycare issues and family responsibilities. From September 2004 to January 2005 she participated in the program on a regular basis and demonstrated both a commitment to learning and an ability to balance her responsibilities at home with her studies. As of January 2005 Elizabeth had completed most of the preparatory activities and demonstrations for LBS Level 3 numeracy and communications and was still participating in the program. Following are her comments:

"After the program, I plan to enter the college and take courses. My goals are to take it one assignment at a time and to work through the levels and work toward post-secondary. The learning activities [in AlphaRoute] are easy to follow and I like the variety of activities. I am also a lot more focused and able to think more clearly than in the past. I can see the work I have completed. I know I've done [well] because of the results with my tests and the progress sheets for math and communications. The teacher is very encouraging and supportive when I need his assistance. My schedule is flexible, and I can learn at my own pace. If I need help at home, I can email my teacher. I also like the fact that I can do my homework from any available online computer."

Case Study 7

Charles was a single parent of a mentally challenged son. He used his new skills in the development of a small handyman business, creating posters and business cards, and improving his letter-writing skills. He hoped to become self-sufficient in the not-too-distant future and greatly reduce his reliance on assistance for periods of time. Charles wanted to build this business, as it would allow him to generate income while providing for himself and his son. His employment successes, coupled with the challenges of being a single parent, made it difficult for him to maintain his commitment to the project.

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Case Study 8

Keith entered the LBS Distance Delivery Program with minimal skills in communications and mathematics. Participating in the program was part of his plan to get off the street and become employable. Schoolwork was clearly difficult for Keith, yet he demonstrated his commitment to the program by reporting regularly and completing his assignments. When he began the program, he was uncommunicative and needed his mentor to direct him in his daily activities. The mentor gradually left him to organize his own time and activities. After some time, Keith began to check in with the mentor once a week. He showed more confidence in himself and in his ability to learn, and he was more open and willing to talk. Keith was proud to be a partner in directing his own education. Working on LBS Level 2 communications, he demonstrated an improved ability to comprehend and to respond to written material. Moreover, he became a confident Internet user and was able to access and utilize a range of educational resources. He demonstrated an increased ability to express his ideas in writing and an understanding of basic proofreading including spelling, punctuation, and sentence structure. Keith's skills involving operations with whole numbers improved noticeably. Following are his comments:

"When I first started LBS I was nervous and uncomfortable. I didn't know what the letters LBS stood for. I really didn't know what the program [was] all about. [Before I started the program] I wasn't very interested in reading and I had a hard time following and understanding what I was reading. I didn't really do much writing, I had a hard time with math. I never had any experience with computers. Now that I am in LBS I feel more comfortable at the college and I understand the way the LBS program works. I can also plan my schoolwork for the day and if I need help I ask. I can understand better when I am reading a newspaper at home or online. I am improving in math and now am working on lessons [in] division. I learn[ed] how to turn on a computer, use the Internet, Microsoft Word, Keyboarding Tutor, and I can also do web searches, log on to websites such as AlphaRoute, and do AlphaRoute exercises. I can help other people with their computers."

Case Study 9

Larry chose to participate in the distance project because he was uncomfortable in the classroom setting. He had a speech problem that became more evident when he was anxious, which he often was whenever he found himself in a group setting. Since starting in the program, Larry has made great gains in confidence. An example of his ease with the project and the people involved was demonstrated during the Christmas party, when almost no signs of his speech impediment were evident. He lived with his parents and shared his learning with them. By his mother's report, Larry helped her become computer-literate, and had his father working on phonics, using a program the agency provided. Larry's mother stated that she noticed real progress in her son and that she wished her husband could have had this chance 45 years ago.

Community Impact and Promoting Literacy

An associated goal of the project continues to be the promotion of literacy in the communities of service. This goal has been addressed by providing direct services to the learners involved, but also by other means. The following are summaries as reported by the project agencies.

Kingston Literacy (CLCN)

This agency succeeded in forging links with the community's public schools. The program is impacting parents' basic skills and therefore their children's success in school. There have been increased referrals by the schools, reports from parents on the positive changes they have noted in their children, and letters of support. The relationship has resulted in a clearer understanding of adult basic literacy on the part of the schools. The program has also promoted the establishment of partnerships with local businesses, and these close relationships have resulted in referrals both to the distance learning program and to the regular LBS programs.

Sioux-Hudson Learning Centre

Most learners in the FNMT group reported the distance program increased both their literacy skills and their confidence for participation in the management training. Immediate community impact was seen; these learners continued working in their respective communities in isolated regions of Northwestern Ontario while they completed their program as well as the literacy and numeracy skills upgrading component offered through the Sioux-Hudson Learning Centre. The impact of the program on the participating communities of the entire region has to be underlined, as the program provides services in remote and isolated areas without access to regular literacy programs. By providing skills upgrading, this program also served to develop future community leaders.

The Good Learning Anywhere program offered by the Sioux-Hudson Learning Centre in Hudson helped to counteract community perceptions of always being left out and of feeling that "Sioux Lookout never does anything for us." By having the program at a readily accessible site (a local coffee shop), the drop-in value of the program to some 30-40 more people in the community was significant. Some of these community members even started bringing their laptops to find access. Another community impact was that learners did not have to arrange rides or taxis into Sioux Lookout (a \$60 trip) and could work on their studies in their own community. The program was instrumental in bringing high-speed Internet access to the community. The program has also been offering a course called "Internet for the Terribly Terrified", to provide basic computer skills orientation and to involve even more community members.

Confederation College

The program increased community access opportunities and was successful in generating a number of agency referrals and potential partnering opportunities at the Kenora and Thunder Bay campuses. Learners were provided opportunities to develop their skills while maintaining family and work commitments. The establishment of a computer lab/drop-in facility at the Ontario Works Employment Resource Centre in Thunder Bay provided an additional opportunity for learners in a non-threatening environment; staff at the centre responded enthusiastically to the program and indicated it provided a positive learning experience for their clients. Facilitators played an important role in promoting literacy in communities and in conducting outreach activities. Interest in the program via word of mouth was in evidence at both campuses through inquiries from other communities and individuals.

Forming Partnerships and Advisory Committees

Advisory committees were often used to provide valuable programmatic input and to establish ties to organizations within the target communities and regions in order to form partnerships. The following are summaries of some of these activities as reported by the project agencies.

Kingston Literacy (CLCN)

CLCN built partnerships with the schools and school staff. This was done via distribution of flyers at the schools and making school staff aware of the program. The schools were aware of families who had literacy issues and proved to be a good source of program referrals. The principals at the local schools were also supportive of the program.

An already strong relationship with OW was further strengthened, offering literacy skills upgrading to clients who had previously been difficult to serve for a variety of reasons. The education director for OW was a solid partner and regular meetings were held with OW caseworkers to promote all the services provided by CLCN.

An unusual partnership was built with a hotel across the street from CLCN. The hotel contains a bar, restaurant, and living accommodations for twenty people. The owners were approached about placing an outreach poster in the bar. The outcome of this has been four referrals, resulting in the placement of one participant in the control group and three participants in the distance program.

Three advisory committees were established, one in each community where the distance program operated. Each committee included community leaders, service providers, business owners, and long-time community members. Meeting on a regular basis was not consistent or needed. Since the project was based on distance, distance methods were used to communicate with the advisory committees.

Sioux-Hudson Learning Centre

The Sioux-Hudson Learning Centre operated a community advisory committee that fluctuated in its membership and involvement according to the availability of, and perceived benefits to, the members. Having high-ranking administrators was a positive factor for support and endorsement, but had drawbacks in terms of time requirements and direct involvement. Much effort was put into forming a partnership with the Band Council at the Pikangikum pilot site, but there were many challenges to sustaining a lasting partnership. The FNMT program manager provided a great deal of feedback, help, and direction throughout the program.

Confederation College

Initial advisory committee meetings were held in Thunder Bay. Stakeholders, potential partners, and other community agencies and organizations in Thunder Bay and Kenora were contacted individually and were provided with an overview of the pilot project. Ongoing informal discussions and updates were maintained with key stakeholders and partners. Also, Literacy Northwest provided ongoing updates to local and regional service providers.

AlphaRoute Evaluation

For a detailed description of AlphaRoute features, please refer to Appendix G, AlphaRoute Features and Trial Access Information.

Activities

There are two areas in AlphaRoute where learning activities are found: in various buildings and icons on the portal home page, and in the Resource Centre. Activities located in the Resource Centre save results to the learner's portfolio and mentors can track these activity results. Activities located outside the Resource Centre are self-scoring and cannot be tracked by mentors. The four research sites incorporated the AlphaRoute learning environment into their delivery models in a range of ways. J'aime apprendre, for example, presented their learners with the full list of activities, Levels 1-5 located in the Resource Centre, as part of their learning path. Learners worked through the activities consistently as part of their learning expectations. Progress was measured and course completion was rewarded with a certificate. CLCN used the AlphaRoute training plan tool to set up a personal list of Resource Centre activities for distance learners, to guide their learning path and to support mentors in getting started with new learners. Sioux-Hudson Learning Centre and Confederation College guided learners to Resource Centre activities as appropriate, and let students explore AlphaRoute to determine what activities were of interest to them. Activities that learners did outside of the Resource Centre were not tracked by the research project.

Interactive Tools

Generally, both ideas and enthusiasm were expressed for the use of the interactive tools in AlphaRoute. With enhancements to the content and features of the tools proposed for 2005/06, a better assessment of the importance of the interactive tools for distance learning will be possible. Most of the technical problems presented by the distance sites involved issues external to the AlphaRoute learning environment. AlphaPlus will continue to provide Help Desk support to these pilot sites to resolve these external issues as much as possible. Project agencies clearly identified observations and recommendations made regarding training in blended learning to enhance AlphaRoute activities with print-based materials, websites, and software; efforts to respond to the expressed needs will be addressed by AlphaPlus during 2005/06. The following sections review the various interactive tools of the AlphaRoute learning environment in the context of their use for distance learning and for flexible delivery during this project.

Discussions

There are three asynchronous discussion areas in AlphaRoute. All three were designed to provide learners with a place to learn transferable skills and to interact with other AlphaRoute learners.

Distance learners at J'aime apprendre used the AlphaRoute Writing Club and Cyber Search discussions because the use of those tools was built into their learning curriculum. It was clear from the frequency of message postings during 2004 and into 2005 that learners were accessing the discussions and posting themed messages at the same time. This was the only distance pilot site that integrated use of the discussion areas into the learning curriculum and followed up by posting their findings in the discussions.

Cyber Search

Every two weeks an Internet search activity is presented, with audio and graphical support, to interested AlphaRoute learners. Learners are introduced to a topic and/or website and are invited to conduct research and report their findings to the Cyber Search discussion area.

Confederation College noted that the Cyber Search activities in AlphaRoute were preferable to Internet exploring activities available through the college and other college sites, and that distance learners were referred to Cyber Search as part of their learning options.

Chat

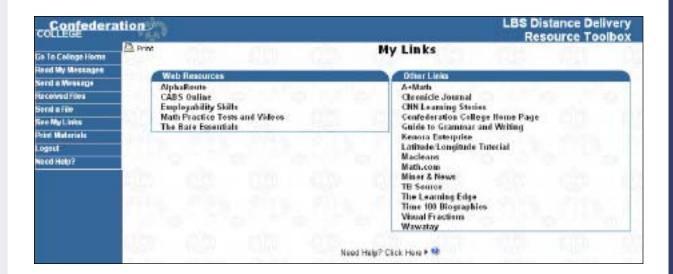
One basic chat room, which includes the option for Private Chat, provides learners with a live real-time place to meet other AlphaRoute students from across Canada.

A critical mass of English AlphaRoute users has built up such that it is reasonable to expect learners will meet another learner or mentor in the chat area. However, it was very hard to gauge when and if distance learners were using the chat feature. Although a small community of learners who used chat regularly had been developing, there was no evidence learners in the distance pilot were active in the chat. The Sioux-Hudson Learning Centre noted that using chat required a stable Internet connection, which was not available for much of the time at the pilot sites in Hudson and Pikangikum. Distance learners at Confederation College noted that due to slow keyboarding speeds, participation in the chat was too laborious and slow for them to enjoy.

Email

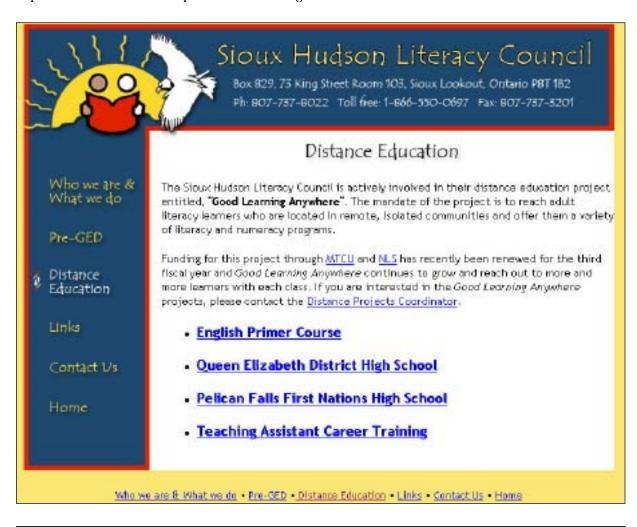
All AlphaRoute learners and mentors are set up with an AlphaRoute email account upon registration in AlphaRoute.

Due to server storage problems, the stability of the AlphaRoute email program was not ensured throughout the course of this project. This meant it was not possible to assess the contribution AlphaRoute email could have had on the development of online communities, or to assess how email could play an important part in distance learning environments. Confederation College tried without success to use AlphaRoute email, as did J'aime apprendre with their distance learners. However, the instability of the program led the mentors to choose free web-based email services, which they used successfully with learners. CLCN and the Sioux-Hudson Learning Centre used free web-based email accounts with reasonable success as well.



Use With Other Learning Resources

The project manager at Confederation College spent considerable time at the project's front end focusing on developing a blended curriculum that adapted the existing college curriculum. Efforts were made to include AlphaRoute with software, textbooks, on-site booklets, and websites, and to integrate resources in order to provide a framework for learning activities and skills development. Print materials were made available online as PDF files, and mentors directed learners to AlphaRoute Cyber Search activities and to the Learning Edge¹⁹ newspapers and newspaper activities, which are multi-level audio-supported interactive learning activities presented in the format of a series of newspapers. An online toolbox was developed to enable students and mentors to access learning materials online in a customizable format directing learners to their individual learning paths. The resources learners needed to meet their learning goals were clearly identified and mentors could add feedback as required. For instance, the Confederation College toolbox model ensured that mentors and learners had access to common resources in a format supportive of online and independent learning and that resources were used consistently. AlphaRoute activities were part of the learning tools.



¹⁹ To view a current issue of the Learning Edge: http://www.thewclc.ca/edge/

The other pilot sites developed a resources website as a central place for blended learning resources and news updates. The sites were updated weekly and included a thought for the day, weekly news, resources, contact information, and meeting schedules for mentors and fellow learners. Because many learners were learning from home, the website became an important place for learners. The curriculum focused on AlphaRoute whenever possible, following all activities with learners working through the levels over the course of ten weeks. Print resources already available were integrated into the curriculum to complement the AlphaRoute activities.



Distance Learning



Here you will find links to online learning sessions using Centra software so you can communicate with others online.

You can also access some other sites which may be of interest to you.

Community Learning Centre Napanee has been delivering programs through distance since 2003. This program is designed to reach adult learners who:

- are located in rural communities in Lennox and Addington County
- do not have transportation to another adult upgrading program.
- wish to improve their Essential Skills in reading, writing, math, computers and communication

If you are interested in the Distance Delivery Program, please contact <u>Laurie</u>

<u>DesLauriers</u>, the Distance Project Coordinator.

Funding for this project is through the Ministry of Training, Colleges, Universities (MTCU) and the National Literacy Secretariat (NLS).

The mentors at CLCN also used websites with simple worksheets, including answer sheets that could be printed off and used in combination with AlphaRoute activities. The Index to Web Resources²⁰, provided on the web through AlphaPlus, was used to locate resources to extend AlphaRoute activities. Due to slow Internet connections, the pilot sites in Kaladar and Tamworth had significant problems using AlphaRoute, so software applications were preferred.

Because Internet access was unavailable to learners at the Pikangikum pilot site of the Sioux-Hudson Learning Centre for a good part of the project, the mentor relied on the use of print-based resources. In the FNMT, print-based workbooks were the primary resource for numeracy upgrading, supplemented by websites found using the Index to Web Resources and automatically generated worksheets. At the Hudson pilot site, print-based lessons were mailed out to learners to complement the use of activities in AlphaRoute. This agency also tested a textbook, video, and Internet-based blended learning pre-GED program.

Technical Challenges

Requests were made to have parts of AlphaRoute burned onto CD-ROM for use by learners who did not have access in their community to a high-speed Internet connection. AlphaPlus decided not to provide AlphaRoute offline, as it was viewed as an online environment developed for web-based use. AlphaPlus Help Desk support was important, and provided troubleshooting advice to increase the speed of the computers used by learners in their homes, including regularly deleting cookies, cleaning up the hard drive files, and changing over to external hardware modems, thus alleviating to a large degree the most challenging technical problems for learners without high-speed Internet access. Lack of Internet access and loss of Internet connections at some pilot sites presented huge challenges for learners and mentors trying to use AlphaRoute consistently. There were also a lot of problems with pop-up blockers. It was found that learners would often wait until they met face-to-face with mentors to report technical problems experienced at home, since it was easier for learners to explain the problems by using a combination of visual, aural, and kinesthetic actions than by documenting or by reporting over the phone.

Assessment

At Confederation College, formal assessments were done using pre-existing college assessments and resources; because of this established assessment process, which was required and which ensured consistency between on-site and distance program delivery, there was no need for the AlphaRoute Placement Tool at the college. Mentors moved away from the use of the AlphaRoute Training Plan, an online tool to capture background information about students' goals and support needs while presenting a learning outcomes matrix articulated to the learning activities found in the Resource Centre. The end result of this training plan development process can be a list of AlphaRoute activities for learners to follow to reach their learning goals. Instead learners were directed to individual activities using the Activity Search Tool.

The Sioux-Hudson Learning Centre used the AlphaRoute Placement Tool and CABS Online, a web-based assessment tool developed specifically for community-based literacy agencies in Ontario.

²⁰The AlphaPlus Index to Web resources is an annotated index of selected Internet sites and resources of interest to practitioners and learners in the field of adult literacy. To consult the index: http://alphaplus.ca/opnhs/english/subjAuth.asp



CLCN conducted learner assessments using CABS Online and completed AlphaRoute Training Plans, generating a Personal List of Activities for the learners at the same time. An initial computer skills course for learners using AlphaRoute and other computer programs was developed but had not been made available to distance learners at the time of this report.

J'aime apprendre used formal assessments developed for the on-site program for initial assessment and for final evaluation purposes. The AlphaRoute Placement Tool and CABS Online are not available in French.

Mentor Toolkit

The Mentor Toolkit is a support and management site for AlphaRoute mentors and includes links to their students' portfolio results, Word Lists, registration and assessment tools, AlphaRoute User Guides, the Café area, email, and the AlphaRoute village. Another resource found in the Mentor Toolkit, called the Activity Identification Builder (A.I.B.) Notes, provides activity development support information included by the activity content developers. The A.I.B. Notes were very useful to mentors and staff when selecting AlphaRoute activities for learners to follow on their learning paths. The Personal List of Activities helped mentors know where to start in AlphaRoute with their learners. Mentor access to the Registration Tool was found to be very useful for checking learner passwords when they were forgotten.

Learner Portfolios

It was reported learners liked their mentors to see their work, to be able to "show it off". Enabling learners to save their work in a portfolio was ideal, especially for independent learners, because self-esteem was impacted positively. There were times over the course of the project when problems with the scoring of activities in the learner's portfolio were reported and fixed by AlphaPlus technical support staff. These technical problems caused some concern among mentors and learners as to the reliability of the AlphaRoute activity results. At times, a mentor's comment would not display in a learner's view of the portfolio. It was determined some of these problems had to do with computer configurations at the user's end, and not at the AlphaPlus server end. Some of these problems arose as a result of the migration of AlphaRoute onto new and better servers. If portfolio answers did not make sense or were scored incorrectly, learners got frustrated and would be reluctant to return to AlphaRoute. AlphaPlus is working on plans to overhaul the portfolio tool and to respond to recommendations made from the field regarding the tool's requirements.

Training

In many cases mentors were hired just before project start-up and had little time to devote to the AlphaRoute training provided on-site on an as-needed basis by AlphaPlus. Sioux-Hudson Learning Centre adapted the AlphaRoute training modules and trained their mentors using Centra virtual classroom sessions. Beyond the initial tutor training offered by AlphaPlus, two research sites indicated the need for ongoing mentor training and support by way of professional development, noting the differences in mentor roles between on-site and off-site distance delivery. Throughout the project, AlphaRoute training was provided using a training CD-ROM and support resources, including the AlphaRoute User Guides. AlphaRoute User Guides provide a comprehensive overview of the functions and features of AlphaRoute and how they work, as well as providing basic technical troubleshooting guidance. There are five PDF guides available through the Mentor Toolkit.

Learner and Practitioner Orientation

J'aime apprendre organized group meetings with learners three times per week for the first three weeks and once per week thereafter on an as-needed basis to provide computer skills orientation. The delivery model stipulated learners had to be able to work on their own and at home with a minimum of supervision and direction after two to three weeks of face-to-face workshops. Hence J'aime apprendre exclusively targeted learners assessed at LBS Levels 3-5 to participate in their distance program. Learners were assessed for computer skills and given initial computer training to ensure success. Learners who had never used a computer before were given an extra week of initial computer instruction including the basic use of a computer, Windows, the Internet, and AlphaRoute. Self-management and self-direction skills were regarded as particularly important for ensuring the success of learners working from home.

At CLCN, orientation and support binders were developed for the learners to introduce them to AlphaRoute and to provide print-based support for remembering passwords, usernames, and access information for AlphaRoute. Access information for commonly visited websites was supported through the use of flow charts, and flow chart templates were provided to assist learners with other websites. The mentors provided face-to-face computer skills orientation to the distance learners in the computer lab and in learners' homes.

The Sioux-Hudson Learning Centre developed an orientation package that included an orientation binder with all the necessary information about accessing AlphaRoute. For some learners, having a brand new binder was significant and self-esteem-building in itself. A course called "Internet for the Terribly Terrified", developed for seniors, was adapted for orientation purposes with adult distance learners. This orientation was developed for three one-hour sessions. A participant's manual was created and given to each learner with the training plan so that learners could easily find contact information, training goals, and the student journal. In addition, training sessions and workshops for mentors on the subject of learner retention were developed and provided through Centra, a web-based communication and learning environment, which was also used to communicate with and support learners at a distance.

At Confederation College an orientation to computer skills was integrated into orientation sessions covering the use of the LBS Distance Delivery Resource Toolbox, AlphaRoute, and self-management strategies. The mentor gave this orientation to learners in small groups or on a one-to-one basis when learners began the program. Initially, some learners spent much time learning basic computer skills, based on the assumption they needed to become good enough at keyboarding to be able concentrate on their literacy-related activities. Learner orientation took several weeks and included the use of computers and specific applications, individual training plan development, and self-management support. Although the proposed target population for the pilot site in Kenora identified learners assessed at LBS Level 3 as the minimum requirement for participation in the distance program, many learners referred were assessed at LBS Level 2. Extensive efforts were made to meet the needs of these learners by adapting the curriculum and the orientation process.

Overview and Summary of Results

Distance Learner Demographic Profiles: Distance learners in this study did not differ significantly in their demographic profile from traditional classroom learners.

Service to Isolated Communities: Distance learning can be a valuable tool in providing services to rural and isolated populations.

Distance Learning at Low Literacy Levels: Distance learning can be an effective tool with learners at relatively low levels of literacy. In addition, these learners have a high level of access to technology and online learning tools, and use these tools in a beneficial manner.

Problem-Solving and Independence: Distance learners appear to have slightly higher preferences for working on their own and for using self-problem-solving strategies than do their traditional classroom peers.

Long-Term Acceptance: Distance learning, being a somewhat new delivery system in Adult Basic Education (ABE), must be sustained over a period of time in rural and Aboriginal communities to gain the trust and acceptance of the local populations.

Time Frame Differences: Distance learners appear to have less time to devote to learning activities weekly and therefore may spread their class time over a longer period.

Learner Profiles: Surveys to inquire about learner suitability to distance delivery methodology have not yet been developed far enough to be accurate predictors of distance learner success.

Personal Interaction: Personal interaction and some face-to-face contact between teacher and learner are important even in distance education. Learners appear to be able to sustain their efforts in the program with a relatively small number of hours of direct instructional contact (an average of less than two hours per month). Distance learners have the same need for support and connection to their program and to their teachers or mentors as do traditional class students. This connection can be accomplished by a variety of means.

Instructional Preparation: Teachers need to spend much more of their time in management tasks to prepare for instruction in a distance delivery program than in a traditional program. This difference should continue to be studied as the distance learning program becomes more stabilized over time. In the first years of a project, it is to be expected that more management and set-up time would be needed.

Word of Mouth Recruitment: In rural locations and in Aboriginal communities, recruitment and retention strategies must be linked to personal contacts with key community members and to meeting learners directly. Much of the recruitment is done by word of mouth.

Retention and Orientation: Retention is related to strong orientation programs and to learners establishing close relationships with teachers. Much more orientation time is necessary with distance learners.

Study Space: Distance learners reported a higher need for study space and workspace in their homes.

Different Skills: Distance learning differs significantly in the skills required by teachers and staff and therefore extensive training in the use of distance delivery methods is necessary.

Staff Development: With distance education programs, there is a strong need to train teachers in the art of teaching via differing media such as online, over television, and via phone.

Funding Base: The provision of a stable and ongoing funding base is desirable so turnover of staff is kept to a minimum and retraining is not as necessary in this somewhat complex field.

Business and Infrastructure: Agencies entering into the provision of distance learning need to provide a business plan that includes the addressing of technology and infrastructure issues. In this study, partnerships with other agencies were often helpful in meeting infrastructure needs.

Computer/Internet Access: There seems to be a high level of access to computers and the Internet among learners, even in rural locations, although the quality and speed of Internet connectivity varied. In addition, participation in this project increased learners' use of both home computers and the Internet.

Technology Skill: In addition to academic skills gains, distance learning promotes the development of technology skills of learners.

Analysis and Conclusions

The Distance Delivery Development and Research Project yielded extensive data that can guide future distance and flexible learning in the province as this learning moves to the next stages. Following are some of the conclusions drawn from the research to date, presented in a question-and-answer format.

Profile of a Successful Distance Learner

What is the profile of a successful distance learner? How does this profile differ from that of an on-site learner?

The distance learners enrolled in this project were mostly women in the age group of 27-39 who had not completed high school and who were enrolled primarily to allow them to work at their own pace or to accommodate family or job obligations. Most of the learners had not enrolled in an adult education class for a number of years and had sustained their previous enrolment for less than a year. Learner goals varied significantly, the main goals being training, and achieving employment and personal independence. Most learners had the support of family or friends for entering the program. As well, most learners preferred to work on their own. A significant trend noted was that few project learners were enrolled in other programs. This points to the importance of distance learning as an education option in rural and isolated communities. This project was also significant in serving Aboriginal populations and their unique needs and culture.

- Distance learners do not differ significantly in their demographic profile from traditional classroom learners.
- Distance learners appear to have a slightly higher preference for working on their own and for self-problem-solving.
- Distance learners have the same need for support and connection to their program and teachers as do traditional class students.
- Distance learners appear to have less time to devote to learning activities weekly and therefore may spread their education over a longer period of time.
- Surveys to inquire about learner suitability for distance delivery methodology have not yet been developed far enough to be accurate predictors of distance learner success.

Learner and Practitioner Roles

What are the appropriate roles of the learner and the practitioner in distance delivery?

Personal interaction and some face-to-face contact between teacher and student is important, even in distance education. Learners appear to be able to sustain their efforts in the program with a relatively small number of hours of direct instructional contact (an average of less than 2 hours per month).

Teachers need to spend much more of their time in management tasks to prepare for instruction in a distance delivery program than in a traditional program. This difference should continue to be studied as the distance learning program becomes more stabilized over time. In the first years of a project, it is to be expected that more management and set-up time would be needed.

Assessment of Distance Learning

How should learning be assessed at a distance?

- Internet and computer-based assessments facilitate distant assessment.
- Learners should be assessed both on academic progress and on other associated skills such as technology competence and attitude toward learning.
- In the early stages of a distance delivery program, staff time should be tracked so proper allocations of time can be made to enable staff to fulfill their unique roles.
- Proctoring and confidentiality of standardized assessments need to be looked at carefully when assessment takes place in non-centralized locations.

Recruitment and Retention Strategies

What kinds of recruitment and retention strategies are necessary?

- In rural locations and in Aboriginal communities, recruitment and retention strategies must be linked to personal contacts with key community members and to meeting learners directly. Much of successful recruitment is done by word of mouth.
- Retention is related to strong orientation programs and to establishing a personal relationship with the teacher.
- Much more orientation time is necessary with distance learners.
- Distance learning, being a somewhat new delivery system, must be sustained over a period of time in rural and Aboriginal communities to gain the trust of the local populations.

Learning Delivery and Methodology

What are the primary differences between on-site versus distance learning delivery and methodology?

Two main differences between on-site versus distance learning delivery and methodology were noted in this study. The first difference was in the types of delivery methods. As expected, distance learners relied much more on technology and non-face-to-face delivery of instruction. This meant the instructors had to view themselves more as facilitators of learning, and the learners had to work more independently.

The second difference was in the relative mix of instructional time spent by instructors. Instructors for distance learning spent more of their time in preparation and learner support, as opposed to traditional instructors who spend more of their time in direct instructional delivery.

Distance Learner Support

What supports are needed for learners?

- Orientation, to both the program and the technology associated with delivery, is far more important
 with distance learners. A thorough orientation process must be established, as well as an early
 training program in the use of the curriculum delivery method and in how to communicate with the
 instructor.
- As with traditional classroom learners, distance learners need a certain amount of contact with their instructors.
- Distance learners reported a higher need for study space and workspace in their homes.

Facilitating Self-Management

What are effective approaches to facilitating learner self-management?

Sites reported learners were most successful in self-management when the following were in place:

- Generic web portals and customized website access, in which to post content and scheduling information that is frequently updated by teachers and mentors
- Computer skills orientation, to enable learners to navigate with self-efficacy and to minimize the amount of troubleshooting support required; support is more quality-oriented as a result
- Program orientation (which may also include an introduction to technological skills), to make learners aware of procedures, schedules, and processes and to minimize the amount of mentoring support required; support is more individualized as a result
- Frequent and regular access to technical and mentoring support, provided in a variety of ways, depending on the needs of individual learners in terms of media and/or scheduling
- Face-to-face contact with the mentor during the orientation process, which benefits future learnermentor communication with regard to lower learner expectations and higher self-efficacy
- Frequent and regular communication between learners and teachers or mentors, to discuss learning progress, challenges, and successes
- Frequent and regular communication among learners, to facilitate building a learning community and a peer-supported learning environment

Successful Partnerships

What kinds of partnerships are required for success?

The kinds of partnerships that can help in the success of flexible and distance learning programs include:

- Partnerships with various stakeholders in the community for the purposes of promotion, recruitment, and the establishment of an advisory committee that represents the needs and strategic directions of the literacy program and the community in general
- Sponsorships from corporate partners, such as donations of computer hardware or donations of employee time for participation in literacy skills upgrading at a distance
- Partnerships with governmental and charity-based organizations in the community, county, or
 province for access to donated computer hardware and complimentary support services that adult
 literacy learners are entitled to, for example, bus passes and Internet access
- Building of and participation in a community of practice to exchange information on best practices, challenges, and successes among participating project agencies with the potential to provide expertise and support to other agencies that are exploring distance and flexible delivery of literacy programs as an option to their existing on-site services
- Partnerships with governmental agencies outside the adult literacy sector, for example, services in relation to social assistance, employment insurance, family and youth assistance, social housing, and health

Practitioner Support

What is the process for supporting practitioners in distance delivery?

- Provide extensive training in the use of distance delivery methods.
- Train teachers in the art of teaching via differing media such as online, over television, and by phone.
- Provide a stable funding base so turnover of staff is kept to a minimum and retraining is not as necessary.
- Establish an organization of practitioners for support, sharing, and common research.
- Consider mentoring between experienced and new providers of distance delivery.

Basis for Funding

On what basis should distance learning be funded?

This research question requires further inquiry, perhaps in the next phase of the project. For now, some of the principles of future funding must include:

- Recognition that adequate funds must be allocated for community assessment, for assessment of learner needs, and for other start-up costs
- Recognition that program funding cannot be based on traditional "seat time"; exploration should be
 made into block grants, funds per student, funding based on progress or students reaching
 milestones, funding based on ratios of face-to-face versus independent time, or other funding
 methods
- For the next phase of the project, consideration of block funding, but also a requirement for certain minimum numbers of learners to be served
- Adequate funding for start-up and program development of distance learning
- Special funding or matching funds from community partners, provided to support hardware, software, training, and maintenance/support services

Technology and Infrastructure

What technology and infrastructure are needed to support distance delivery?

Agencies entering into the provision of distance learning need to provide a business plan that includes the addressing of technology and infrastructure issues. In this study, partnerships with other agencies were often helpful in meeting infrastructure needs.

There seems to be a high level of access to computers and Internet among learners. In addition, participation in this project increased learners' use of home computers and the Internet.

Additional Benefits

What are other benefits of distance learning?

- Increases in technology skills of learners; learners increased their technology skills by 16%, most significantly in eleven or twelve skill areas; distance learning students tended to start with higher levels of technology skills
- Possible gains in self-sufficiency and self-management (this needs further investigation)
- The addressing of significant barriers experienced by some learners, such as transportation, the need for more self-pacing, child care needs, work schedule needs, and lack of local traditional classes

Other Conclusions

What Other Conclusions Were Reached?

- This project provided valuable data and lessons for working in remote and isolated communities and with Aboriginal populations. The importance of community-building, establishing relationships, working with community agencies, and gaining trust were all noted.
- In certain cases, community facilitators may serve as valuable adjuncts to the development of successful programs.
- This project also provided evidence of the potential for enlisting and incorporating local community resources, supports, and expertise and for promoting collaborative approaches to program design, development, and delivery. This combining of local and distant resources proved to be an effective means for gaining the trust of isolated and Aboriginal communities, in that the combination provided a means to honour local expertise and culture while infusing other materials, teaching, and distance resources.



Recommendations

Program

- **Encourage other interactional methods.** Continue to foster alternative methods of learner-to-instructor interaction in distance education programs. If this is not done, instructors are often overly reliant on methods they are already familiar with (that is, face-to-face interaction).
- **Involve organizations within the community.** This project provided evidence that significant barriers such as the lack of appropriate technology, the need for professional development to facilitate distance delivery, the need for recruitment, local community mistrust or hesitancy, the need to develop appropriate materials, et cetera can be overcome with well thought-out, appropriately supported, and community-supported projects focusing on the needs of the learner.
- **Provide different training.** Keep in mind that the role of the distance learning instructor or mentor differs in methodology and in the relative amounts of time required for various tasks. Provide different training opportunities and support services for teachers at a distance.
- **Prepare for next stages.** Offer distance learning pilot programs in other settings to further expand the research on the viability of these programs. It is recommended MTCU sponsor the next two phases of program development as:

2005/06: Focused Program Design Recommendation Stage

Overarching Research Question:

In a successful distance learning program, what are the key components that should be recommended for a wider implementation?

Investigation Questions:

- What ratio of interactive hours to independent hours best serves various distance learners?
- What methods should be used to measure participation and to determine funding for distance education?
- What types of staff development do distance education staff need in order to be effective?
- What populations are best served by distance education?
- How many students can a distance learning mentor successfully monitor?
- Can screening procedures and instruments help identify which learners would have the most potential for benefiting from distance learning?

Strategy:

Fund four existing sites and three to four new sites according to criteria designated by the Ministry. Use the existing sites to mentor the new sites whenever feasible in order to shorten start-up time and to benefit from lessons learned. Collect data to study the kinds of questions posed above. Use this study's research design to help formulate the strategy for 2006 and beyond.

The new settings and programs might include:

- A distance learning site in an urban or suburban area, to test the viability of distance learning when distance is not the main barrier
- Distance learning programs for ABE/high school equivalency; the high percentage of students in this study who had no high school diploma and were unemployed supports this recommendation
- An LBS agency working with learners in the Deaf stream

2006: Expanded Implementation

Overarching Research Question:

How can distance learning best practices be implemented on a wider scale in the province?

Investigation Questions:

- To what extent can the program be disseminated more widely?
- How does the previous research inform the application criteria and process?
- What are the recommendations for funding mechanisms for the implementation stage?

Research Design

- Control Groups: Identify control groups earlier in the study design and attempt to match more
 demographic factors with project group earners. This will permit more thorough comparisons of the
 results between distance learning programs and more traditional classroom programs.
- Research and Data Collection Instruments: Modify various data collection instruments to reflect the
 findings of the first research period. This should involve a thorough review of each instrument with the
 independent evaluator, AlphaPlus staff, and site staff. Examples of needed changes noted to date include:
 - Add a question (or questions) on the degree of connectedness learners felt with their instructors for
 possible analysis as a predictor of student retention and success.
 - Eliminate duplicate questions across questionnaires.
 - Clarify "trouble getting to an on-site LBS program" as referred to on the Intake Questionnaire. Does this mean the program is full, or does it refer to distance or other barriers?
 - Include questions that are more specific about any barriers to learning that are identified during enrolment.
 - Clarify the wording of "time since last enrolled in adult education". Suggestions are to have a blank to be filled in for the number of years, and to clarify what is meant by "does not apply".
 - Develop an instrument to more accurately measure learner self-management and/or self-motivation.

Future Study

- **Self-Management:** Refine the instrument to measure learner self-management. The current study included a widely used instrument that had learners rate their ability to work independently. This instrument has not, to date, been effective in identifying significant learner self-management differences for distance learners.
- **Learner/Instructor "Connection":** Develop an instrument to measure the degree of perceived "connection" between learner and teacher, and to measure correlations to other factors such as time spent, type of communication method, retention, et cetera.
- **Expansion:** Develop materials and more program emphasis on other skill areas such as numeracy. Continue studies to determine if these other skill areas are subjects that can also be successfully learned through a distance delivery program.
- **Contact Time:** Early indications were consistent with the 3:1 ratio of independent learner time to interactive time found in other studies. This warrants further study in Ontario with a larger sample size in which other factors are controlled to a greater degree.
- **Funding Mechanisms:** Develop funding models that can facilitate the moving of distance learning programs to wider implementation.

Services Offered by AlphaPlus Centre

- **Continuing to carry out research** to further the Ontario literacy field in understanding the potential for flexible learning and to provide MTCU with ongoing and relevant information to inform policy and practice. Exploring new areas of research annually
- Providing program planning and implementation guidance and support
- Providing professional development to distance learning sites through online and face-to-face
 courses, workshops and conferences, and through the development and dissemination of training
 materials, and the development and maintenance of web-based professional development tools
- **Providing resource support** for distance learning sites of all kinds, including print and online and using ongoing research to further the improvement of AlphaRoute for distance learning
- Coordinating and supporting a community of practice for adult basic education distance learning in Ontario, leading online discussions, coordinating virtual meetings, hosting annual summits, and distributing relevant information to all stakeholders and participants
- Providing access to and training for the use of technology-based tools such as virtual classroom software

AlphaRoute

Chat

- Add more structure to the AlphaRoute chat experience.
- Introduce multi-chat rooms based on trades and career paths.
- Encourage chat about essential skills needed for employment, then conduct a career search using chat, discussions, and email.
- Make the chat area more educational.
- Add chat guidelines that require, for example, the use of full words rather than the abbreviations
 typically used in public chat rooms.

Email

- Consider integrating real email programs such as Hotmail and Yahoo! Mail into AlphaRoute, rather than presenting learners with a closed email program which cannot be used outside of AlphaRoute.
- Develop an address book for email.
- Allow email attachments within the AlphaRoute email program.

Learning Resources

- Explore the possibility of bulk-purchasing resources to cut down on program costs.
- Provide AlphaRoute activities mapped or linked with print-based materials, software, and website
 resources.
- Provide resources support and training throughout the project, including orientation to software, websites, and print-based materials.
- Add resources sign-in and sign-out sheets to any mini-collections that are sent out, to assist programs in managing multiple users of library resources within their programs.
- Provide GED preparation content and resources.
- Continue to offer resources support and mini-collections to distance sites.
- Continue to provide opportunities and means for distance site mentors to share valuable tips and information on good resources.

Technical Support

Provide computer troubleshooting orientation, including how to: do cache cleanup, use an external
hardware modem for increased communication speed and ease of use, work with slow and peak
Internet usage in rural communities, and address pop-up blocker problems.

Assessment Tool

- Provide descriptive information about AlphaRoute's activities in order to assist assessors in choosing activities for learners after assessment.
- Enable activities to be presented to learners and mentors as a menu to choose from, rather than as straight lists of activity names.
- Add a Click All feature for the Training Plan matrix section in order to save time.
- Add a content drop-down feature to all portals containing content, so that students with slow Internet
 connections can preview content and choose whether or not to open an area, thereby avoiding
 unnecessary download times.
- Include a keyboarding skills component to AlphaRoute as a pre-skill to learn before using AlphaRoute.

Learner Portfolios

- Provide mentors with correct answers to all Resource Centre activities to save time in reviewing learner work.
- Enable all learner work done within AlphaRoute to be saved to the learner's portfolio for tracking, as well as for building self-esteem.
- Add the ability for all students to save activities partway through without losing earlier work, to allow
 more flexibility for learners who have limited computer access time and/or who experience multiple
 interruptions where they access AlphaRoute.
- Develop a learner welcome page showing learners their Personal List of Activities, as well as ideas for
 other activities to do in a given time period; for example, complete Cyber Search, join the discussion
 in the Café area, et cetera.
- Add the ability for learners and mentors to record which other resources are being used to enhance/extend/blend AlphaRoute activities.
- Allow Microsoft Word files and other documents used in learning to be saved to the learner portfolio.
- Explore e-portfolio opportunities for AlphaRoute.

Training

- Break face-to-face training into digestible sections over the course of a month or more to give time for contextual practice and for deeper learning.
- Have practitioners start their training as students; give them ten AlphaRoute activities to complete before training begins, to get a better understanding of what the student will experience.
- Ensure more efficiency in AlphaRoute use by monitoring use and providing ongoing support to the project agencies to assist with AlphaRoute integration into flexible literacy programming.

Learner and Practitioner Orientation

- Provide training on all aspects of online delivery, including assessment tools, logging of hours, and the AlphaRoute learning environment.
- Provide a stepped approach to face-to-face mentor training that builds in a rhythm of learning, practice, and demonstrations over time. This will help mentors absorb and master the tools.

- Develop a Quick Reference Card for students and mentors as a guide to using a range of tools. The card should be laminated and should also be available online to download as needed.
- Integrate pop-up directions and tips into the learning environment and tools, for guidance while learning.
- Add a Save button to each field in the AlphaRoute Training Plan tool so that each field saves as it is done. This would allow the Training Plan to be done in parts, rather than having to complete the whole process before being able to save anything.
- Explore the possibility of providing live training using Centra across program sites to facilitate the development of a community of practice.
- Provide refresher training after the initial training to mentors and assessors.
- Add a train-the-trainer module to AlphaRoute training, for trained staff to use when they are preparing to train new staff or new mentors themselves.
- Include trained AlphaRoute mentors in the delivery of AlphaRoute training using Centra as a way to contribute to the development of a community of practice online.
- Add a notice board in AlphaRoute where mentors can be alerted whenever more training
 opportunities are coming up, and where interested mentors can easily sign up for training.

General

- **Proper Direction:** Continue sponsoring the current project and identify significant information that can be used to further the use of distance delivery as a viable alternative for adult learners. Encourage using innovative and responsive ways of distance learning to meet the needs of learners and to overcome a variety of barriers, especially in rural or Aboriginal communities.
- **Next Steps:** It is recommended MTCU continue distance delivery of LBS by sponsoring continuing sites and new sites, with emphasis on:
 - The required numbers of learners served at each project site, to facilitate practical budget implementation
 - Reaching other populations to test the viability of distance delivery to a wider spectrum of learners; these other populations might include:
 - Deaf learners
 - · Learners in urban or suburban settings
 - · School board communities of learners
 - Learners more specifically targeted for pursuing high school equivalency goals
 - Learners enrolled in traditional programs who need to supplement or support their education with a distance learning component
- **Application Criteria:** The next phase of the project should require applicants to meet certain criteria, including those related to:
 - Business and infrastructure. Agencies entering into the provision of distance learning need to
 provide a business plan that includes the addressing of technology and infrastructure issues. In this
 study, partnerships with other agencies were often helpful in meeting infrastructure needs.
 - Matching learners with delivery. Continue to allow enough flexibility in the proposal process to allow the design of local programs that match the needs of local learners and communities.
 - Learner numbers. Applicants should be required to serve a set number of learners as a condition of the grant they receive.

- Better Focus of Control Groups: For the next phase of the project, identify a control group earlier in
 the project and more carefully match these students to distance learners, especially regarding
 demographic factors.
- Common Literacy Skills Assessment: Use a common literacy skills assessment instrument at all sites to facilitate increased accuracy in the tracking of learner progress in literacy skills. The use of this instrument should be a requirement for all participating sites.
- Funding Model: The next phase of the project should include identification of a funding model for distance delivery programs. This model should include recognition of:
 - · Differences in how instructors must use their time
 - The need for additional funds for learner recruitment
 - A greater need for orientation programs, technology support, and partnerships
- Other Delivery Methods: Encourage experimentation with other methods of learner-to-teacher interaction and program delivery, such as video checkout, web-based conferencing, links to television broadcast, et cetera. De-emphasize lab-based programs.
- Distance Learner Profiles: Continue to research profiles of learners who are successful in distance learning.



Appendices

- A. Project Proposal Call
- B. Project Outcomes and Goals
- C. Application and Selection Process
- D. Project Key Dates and Timelines
- E. Role of and Support from AlphaPlus
- F. Data-Gathering Instruments
- G. AlphaRoute Features and Trial Information

Appendix A. Project Proposal Call

Appendix A

2003/2004 Literacy Research & Development Project Proposal LBS Distance Delivery Development Sites Application Guidelines Ministry of Training, Colleges and Universities

Literacy and Basic Skills (LBS) funded agencies may apply for funding to develop, implement and evaluate models of distance delivery of LBS services through the Ministry of Training, Colleges and Universities (MTCU)/National Literacy Secretariat (NLS) Literacy Research and Development Project Process.

The following are the guidelines that provide a brief overview of development work to date, current development objectives and the application process to become a Distance Delivery Development Site. Please read through the guidelines and the attached Appendix B questions. If your agency meets the criteria and intends to submit a proposal, contact Lisa Rickett, LBS Coordinator at (416) 326-7385 or by email at Lisa.Rickett@edu.gov.on.ca

Overview: Development Work to Date

In September, 2000, the Ministry of Training, Colleges and Universities (MTCU) released *Tools for a New Beginning: A Strategy for Computer-Based Learning in Literacy*. The document outlines how computer-based learning has become an integral component of the training system, and commits MTCU to support expanded participation in computer-based and online learning through the LBS Program.

Delivery of LBS services through AlphaRoute has been a key component of the computer-based learning strategy. AlphaRoute is a web-based learning environment for the use of LBS agencies and learners, and is available in English and French.

Currently AlphaRoute is being used to enhance the delivery of on-site LBS literacy services, giving learners more choice in how they learn. As we move forward with development, AlphaRoute in combination with supplementary learning tools and resources will make it possible for LBS agencies to serve adults at a distance who currently cannot participate in the LBS Program because of geographical barriers or inconvenient time schedules. This mode of delivery will provide learners with more flexible learning options in the time, place and pace of their study.

The next stage of work includes continuing to enhance the AlphaRoute environment for on- and off-site delivery and establishing Distance Delivery Development Sites. Below are the goal and objectives of establishing models of distance delivery.

Goal of Current Development

 To implement sites to support the research, development, implementation and evaluation of flexible models for distance delivery of LBS services

Objectives of Current Development

- To increase access to the Literacy and Basic Skills (LBS) Program
- To create dynamic learning environments that promote off-site use of varied learning media

- To support the implementation of activities as outlined in *Tools for a New Beginning: A Strategy for Computer-Based Learning in Literacy*
- To build upon research already conducted on the use of AlphaRoute
- To build collaborative relationships, resources and training opportunities that will support distance delivery of the LBS Program
- To promote and facilitate learner self-management and self-direction
- To develop and support use of workforce and workplace materials
- To identify further research and development that is needed

Application Process

The application process to become an LBS Distance Delivery Development Site consists of two phases, as outlined below.

Phase I – Development of an LBS Distance Delivery Model and Business Case

February-March, 2003

 Agencies interested in applying to become a Distance Delivery Development Site submit proposals for Phase 1 as part of the regular MTCU/NLS Literacy Research and Development Project Process.
 Deadline for proposals is March 28, 2003.

March, 2003

 MTCU/NLS reviews Phase 1 proposals, and selects up to six agencies to move forward with Phase 1 work.

May-August, 2003

- Phase 1 activities will be carried out from May to August and would include researching and developing:
 - A distance delivery model for the agency, as well as an implementation plan and evaluation framework
 - A business case, with proposed budget to cover one year of operation of the model

August, 2003

• As part of Phase 1 work, agencies submit their business case with a distance delivery model, implementation plan and evaluation framework. Deadline for submissions is August 15, 2003.

Phase 2 – Set-up and Implementation of LBS Distance Delivery Model

September, 2003

- MTCU/NLS reviews business case applications.
- Phase 2 activities will cover the period from October 1, 2003 to December 31, 2004 and include the set-up and implementation of the distance delivery model.

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Applying for Phase I

If your agency is interested in being considered as a potential development site, please read the following criteria.

Selection criteria for LBS-funded agencies to become LBS Distance Delivery Development Sites include:

- Delivers the LBS Program
- Demonstrates innovation in the area of use of technology in literacy instruction
- Demonstrates agency capacity in areas of technological infrastructure and staff skills needed for technology
- Demonstrates an excellent understanding of the LBS goal-directed learning-outcomes approach
- Has set a business direction to increase use of technology to enhance on-site delivery and/or increase
 access to services
- Is prepared to explore and establish partnerships as needed
- Demonstrates a community development approach

Please keep in mind it is important that agencies:

- Are able to commit to the time frame as outlined above;
- Have demonstrated an ability to meet LBS Program business goals and targets; and
- Are willing to participate in a collaborative team approach with MTCU, AlphaPlus Centre and other development sites through all stages of development, implementation and evaluation.

If your agency meets the above criteria and intends to submit a proposal, contact Lisa Rickett, LBS Coordinator at (416) 326-7385 or by email at Lisa.Rickett@edu.gov.on.ca

Appendix B. Project Outcomes and Goals

Appendix B

2003/2004 Literacy Research and Development Proposal Form LBS Distance Delivery Development Sites Application Questions Ministry of Training, Colleges and Universities

If your agency intends to apply to become a Distance Delivery Development Site, please answer the following questions and submit with a completed 2003/2004 MTCU/NLS Literacy Research & Development Proposal.

The purpose of these questions is to assist with identifying agency readiness in becoming a development site. These have been developed based on experience from previous AlphaRoute research pilots and research in the area of distance delivery.

- 1. What is your agency's current business direction with regard to technology use in your program?
- 2. Describe your agency's technology plan. Include technical support for technology infrastructure and staff skills as they relate to use of technology in learning.
- Describe your agency's reasons for pursuing distance delivery of the LBS Program.
- 4. Does your agency use AlphaRoute? If so, how many learners are using AlphaRoute regularly? Describe how your program incorporates the use of AlphaRoute into a learner's program.
- 5. If your agency incorporates the use of technologies or multimedia (video, CD-ROMs, et cetera) other than AlphaRoute to facilitate learning, describe how you do so. Please describe any innovative use of technology.
- 6. Describe how your agency currently provides flexibility in learning opportunities in terms of time, place or pace of study. What other learner-centred approaches to learning does your program use to accommodate learners' needs?
- 7. How does your program facilitate learner self-management and self-direction?
- 8. Describe your agency's approach and success in helping learners make progress, meet their short-term goals and make transitions to further training, employment or independence. How will you or could you extend this approach to support distance delivery?
- Please describe the kinds of partnerships you currently have in place to support or enhance learning in your LBS program.
- 10. What ideas do you have for AlphaRoute use, and other technologies for distance delivery? Describe any ideas you may have for learning tools that would enhance distance delivery.
- 11. Describe your agency's outreach strategy.



Application and Selection Process

Appendix C

2003/2004 Literacy Research & Development Project Proposal LBS Distance Delivery Development Sites Application Guidelines – Phase II Ministry of Training, Colleges and Universities

DISTANCE DELIVERY DEVELOPMENT SITES SUBMISSION PROCESS – PHASE I

The purpose of Phase I is to provide you with an opportunity to research, plan and collaborate with potential partners in order to prepare information necessary to apply for funding to implement a distance delivery model. The information that is required for the submission is outlined below.

Phase II distance delivery submission to MTCU will need to include:

- Articulation of strategic directions
- Distance delivery model business case
- Distance delivery model implementation plan
- Budget for Phase II implementation
- Continuous improvement and performance management plan

Elements to consider as part of the submission include:

- Supports research and development
- Supports LBS Program principles
- Supports objectives of development
- Builds on distance delivery good practice
- Considers funding parameters
- · Supports development of partnerships for sustainability

AlphaPlus Centre will be coordinating research as part of Phase II implementation. AlphaPlus will provide you with details of the research so that you will need to accommodate this as part of your model development.

Below is an outline of the areas that are required for your Phase II submission. Additional information is provided to assist you in developing each category. You may include any additional information you consider important that will support your application.

Phase II Submission Required Elements

1. Executive Summary

Provide an overview of the key components of your distance delivery model that support your submission.



2. Method

Describe the process involved in developing the distance delivery model. For example, who was involved or consulted as part of the process? For what purpose? What meetings were attended, reference groups established, experts consulted? et cetera.

3. Strategic Directions

Identify your agency's strategic priorities as they relate to developing distance delivery. These priorities should provide the context for flexible learning development.

Why are you heading in this direction? Is this market consistent with your agency's strategic priorities? Are the benefits consistent with the strategic priorities? Is the required organizational capability consistent with organizational priorities? Who was consulted? Do you have appropriate approvals?

4. Business Case for Distance Delivery

The business case is meant to assess the potential need/market and the viability of moving to distance learning. Please include the following elements as part of your business case.

a. Purpose Statement

This is a statement that describes the intended goal and results for distance delivery. Please include an input, activity, and result(s) in this statement.

b. Model Description and Rationale

Provide a description of the proposed distance learning model and the rationale that supports this direction including objectives. Below are some questions to consider as you develop your rationale for the proposed model.

Research

How will your proposed model support the research component of Phase II?

> How has research (literature review, consultations) shaped your model design?

Program/Client Considerations

Why is a change required to your current LBS program?

What is the history leading up to this change?

Is there a need or demand to move in this direction?

Who are the stakeholders involved?

Who is already delivering distance delivery?

How will your program address a specific population, and how do you know this population is underserved by traditional LBS programming?

What is your current area of service and how will this change with distance delivery? Is the need supported?

Who will your market be and what is the profile of this client?

> What partner support do you require?

Organizational Considerations

> What is the current situation and what are the possible changes to your agency required to support distance delivery? For example, consider: staff, training, elements of your current LBS program, changes to processes, changes to support systems. You may want to review best practices in distance delivery in order to understand what changes would be required. Other important considerations are listed below.

- o Staff capability and practitioner support
- o Administration and support
- o Assessment practices
- o Technological infrastructure
- o Learning support infrastructure
- o Supporting strategies: outreach strategy (marketing), technology strategy and plan
- o Agency's operational performance (current level of funding, current level of performance, current number of learners and level of demand)
- o Potential performance expectations
- o Partnerships: How could this be sustained? What would you need? i.e., letters of support, et cetera.
- o Student retention plan: current level of retention and what would it need to be and how?

c. Risks

What are the strengths, weaknesses, opportunities and threats (SWOT) in implementing the proposed distance delivery model? How will strengths be maximized and weaknesses be minimized? What are the risks of doing nothing, or doing something? What alternatives do we have?

d. Rationale and Benefits of the Proposed Course of Action

How will the proposed course of action benefit the learners, the service provided, what other deliverers do, what the LBS field does? What are the quantitative and qualitative benefits? What is the benefit to the literacy community? To the regional community?

e. Conclusion and Recommendations

Is the model proposed viable given your assessment? Should you go forward with the model?

5. Budget

Provide a budget for Phase II implementation, detailing costs and describing how they were determined. For example, you may want to compare costs to other distance delivery models, or your agency's prior years' experience. Include assumptions embedded in costing such as number of clients, cost per client, projections of cost and demand. Below are some potential cost considerations:

- Development, research, implementation
- Ongoing maintenance and administration
- Partnerships and collaboration
- Costs to regular LBS program (time, resources)

6. Implementation Plan for Proposed Distance Delivery Model

Provide details of how you will deliver and evaluate the proposed distance delivery model. The implementation plan should include details about deliverables, activities, timelines, persons responsible, resources required, success indicators related to deliverables. Some examples of deliverables or activities may include:

- Promoting distance learning (awareness, access, benefits, costs)
- Developing a technology plan linked to larger organizational planning
- · Developing and maintaining partnerships
- · Collecting data and measuring success
- Training

7. Continuous Improvement and Performance Management

Provide a plan for ongoing evaluation of the distance delivery model including a plan for measuring customer satisfaction. The plan should include outcomes and measures for distance delivery effectiveness, efficiency and customer satisfaction.

How will we know implementation will deliver the desired benefits? What measures will be in place to understand if you have been successful? What has been identified that may impact on strategic directions? How will opportunities for improvement be identified and implemented? Overall, what happens if measures change? If assumptions change?

Submission Process

Please forward your completed submission to Tonya Beveridge at Tonya.Beveridge@edu.gov.on.ca by October 31, 2003 and send the original with the signed attachment (following) by mail to:

Ministry of Training, Colleges and Universities Skills Investment Branch Mowat Block, 23rd Floor Toronto, Ontario M7A 1L2 Attention: Tonya Beveridge

MTCU and NLS will review the submission using the following assigned values below and will contact your agency by December.

Strategic Directions	5
Methodology	10
Business Case	50
Implementation Plan	30
Continuous Improvement and Performance Management	15

Your Declaration:

I/We as a person(s) with official signing authority for the organization named below declare that the information in this Appendix is accurate and complete and that this funding application is being made by the organization with its full knowledge and consent. I/We declare that should our application be successful, the organization will abide by the conditions indicated above. I/We further declare that the organization will provide the financial and activity reports that the National Literacy Secretariat (NLS) may require and that the organization will submit to an evaluation of the activity funded as required by NLS and MTCU.

Legal Name of Organization:				
Name of Signing Officer:				
Title:				
Signature:	Day:	Month:	Year:	
Name of Signing Officer:				
Title:				
Signature:	Day:	Month:	Year:	

Appendix D. Project Key Dates and Timelines

Throughout the project, dates were set to ensure proper program monitoring and the reaching of key milestones. Following are some of the key project activities and their planned due dates.

	KEY DATES AND TIMELINE	Гр.
Project Activity	Project Milestone	Date
Project initiation workshop	Two-day workshop with project sites on project background and outcomes	08/03
Collecting and disseminating information on distance learning	Literature search of resources on distance learning to inform the delivery model development of project sites	08/03-11/03
Distance learning workshop	Two-day workshop with project sites on effective distance learning in ABE	09/03
Mini-collections of resources	Mini-collections of print- and e-based resources customized for each project site re: program planning	09/03-11/03
Program planning workshop	Two-day workshop with sites on program planning	10/03
Review of project proposals	Review of drafts of project proposals	10/03
Project proposal workshop	Two-day workshop with sites on project proposals	11/03
Submit project proposals	Project sites submit proposals to MTCU	11/03
Review of project proposals	MTCU reviews project site proposals	12/03
Hiring of independent researcher	AlphaPlus hires independent researcher	12/03
Mini-collections of resources	Enhancement of mini-collections' print- and e-based resources on program planning, instruction, mentoring	01/04-06/04
Formulate research design	Research design draft	01/04
Staff recruitment for project sites	Project site coordinators and mentors	01/04
Finalize research design	Research framework and methodology	02/04
Professional development and research workshop	Two-day workshop with project sites on research methodology	02/04
Implement distance program	Assessment and selection of resources and media for program delivery	02/04
Design research instruments	Assessment and survey instruments	02/04
Train in use of instruments	Training sessions with pilot sites	03/04
Transfer all instruments to online format	Development of database and online access to submit data	03/04
Begin learner recruitment (continuous intake)	Development and implementation of learner recruitment strategies	03/04
Professional development and research workshop	Two-day workshop with project sites on assessment and mentoring	04/04
Begin distance program delivery	Program delivery to learners	04/04
Begin data collection	Start of first data collection period	04/04
Begin administering intake instruments to all enrolling learners (continuous intake)	Intake instruments to be completed: Common Intake Assessment, Learner Self-Management, Is Distance Learning for Me?, Technical Skills, Literacy Skills	04/04
Enter data from intake instruments into online forms	Data entered on a weekly basis	04/04-07/04
Enter learner and staff log info	Learner and staff hours recorded on a weekly basis	04/04
Monitor data entry	Review of data submissions	04/04-07/04
On-site training sessions	AlphaRoute training	05/04

Project Activity	Project Milestone	Date
Begin monthly project meetings	Project meetings using teleconferencing	05/04
On-site interview sessions	Interviews with project staff and learners	06/04
Professional development and research workshop	Two-day workshop with project sites	06/04
Exit assessment (after 25-30 hours of learning in direct contact with an instructor)	Exit surveys to be completed: Technical Skills Survey, Literacy Skills Survey, and Exit Interview (also when leaving the program)	7/04
End data collection	End of first data collection period	07/04
Examination of procedures and analysis of preliminary data	Review of preliminary data and revision of research methodology	08/04
Mini-collections of resources	Enhancement of mini-collections' print- and e- based resources on program planning, instruction, mentoring	09/04-06/05
Presentation to NLS and MTCU	Inform on project status	09/04
Resume project meetings	Monthly project meetings using Centra	09/04
Resume data collection	Start of second data collection period	09/04
Begin administering intake instruments to all enrolling learners (continuous intake)	Intake instruments to be completed: Common Intake Assessment, Learner Self-Management, Is Distance Learning for Me?, Technical Skills, Literacy Skills	09/04
Enter data from intake instruments into online forms	Data entered on a weekly basis	09/04-12/04
Enter learner and staff log info	Learner and staff hours recorded on a weekly basis	09/04-12/04
Monitor data entry	Review of data submissions	09/04-12/04
Research workshop	Two-day workshop with project sites	11/04
Exit assessment (after 25-30 hours of learning in direct contact with an instructor)	Exit surveys to be completed: Technical Skills Survey, Literacy Skills Survey, and Exit Interview (also when leaving the program)	12/04
On-site interview sessions	Interviews with project staff and learners	01/05
MTCU, AlphaPlus, and research consultant project meeting	Share and react to data, share learning, and inform the future direction of project	01/05
Continue distance program	Project sites continue distance program delivery	01/05-03/05
Conduct data analysis	Data analysis to identify trends based on quantitative & qualitative info collected through forms & interviews	01/05-03/05
Collect control group data	Two project sites collect data from on-site program delivery to compare to distance program data analysis	01/05-06/05
Writing research report draft	Research report draft to provide project background, data analysis results, best practices, recommendations, future research direction, & policy development	01/05-05/05
Submitting final reports	Project sites submit final project reports	03/05
Continue distance program delivery and prepare proposal for the next project phase	Funding extension granted to Kingston Literacy (CLCN), Confederation College, and Sioux-Hudson Learning Centre	05/05-09/05
Project presentation	Conference presentation at CADE 2005	05/05
Research report draft review	Research report draft	06/05-01/06
Journal article	Journal article draft	09/05
Research report production (copy-editing, DTP, translation, and printing)	English version research report, French version research report (Executive Summary only)	01/06–12/06

Table 19: Project Key Dates and Timeline

Appendix E. Role of and Support from AlphaPlus

Literacy practitioners taking a flexible approach to programming require technical skills, confidence in using computers and other ICT (information and communication technology) tools, and an understanding of the shift in roles for both instructor and learner in flexible and distance education. With a flexible learning approach, the instructor becomes more of a facilitator, or guide, for learning, and the learner takes on more self-direction and responsibility for the learning process. This approach requires individualized programming, flexibility in scheduling, a more complex orientation process, different teaching styles, and a variety of resources available to learners to achieve a flexible approach to adult literacy instruction in Ontario LBS agencies, literacy practitioners need access to quality resources, as well as support in the use of those resources. AlphaPlus has attempted to meet these needs through maintaining and improving AlphaRoute, and through offering training and support to all LBS agencies in Ontario, and to pilot sites in British Columbia, the Northwest Territories, Saskatchewan, and Newfoundland.

Through project work, and formal and informal learning opportunities, AlphaPlus staff has developed expertise in the following areas:

- General training and support to agencies throughout the province, supporting 172 LBS agencies in their use of AlphaRoute, with over 5,000 current registered AlphaRoute learners
- Helping practitioners use communication and collaboration tools (such as chat, online discussions, and email) more effectively, and offering online workshops and leading online discussions on these topics
- Helping practitioners incorporate an understanding of blended learning into their programming through knowledge-sharing, skill-building, and community-of-practice-building
- Using Centra; exploring uses for LBS administrators, project workers, and practitioners
- Strategic planning and business planning for wider and more effective use of AlphaRoute provincially and nationally
- Establishing partnerships with organizations provincially, nationally, and internationally in the areas of elearning quality control, e-portfolio research and development, and distance education
- Researching learner satisfaction with AlphaRoute and learner experiences with web-based learning
- Researching practitioner satisfaction with AlphaRoute, and using this information to enhance AlphaRoute training and support
- Researching possibilities for distance learning for adult learners in Ontario LBS agencies, and for reaching learners in remote and underserved communities through AlphaRoute
- Enhancing quality of online resources
- Improving AlphaRoute the technology, the application, and the learning environment so practitioners can use it more easily and effectively, and so learners can benefit more fully
- Blending e-based learning with print-based materials and approaches to teaching, as evidenced by the development of The Guide to Blended Learning ²¹
- Developing high-quality interactive learning activities for building literacy, numeracy, and computer skills for various purposes, such as workforce applications

²¹ Kennell, Trudy (2004). *Guide to blended learning. Skills at Work Series.*Toronto: AlphaPlus Centre. http://alphaplus.ca/pdfs/SkillsatWorkGBL.pdf

AlphaPlus Centre's role in the planning and carrying out of this project included the following deliverables and activities:

Phase 1 Outcomes and Goals

July 1, 2003 - November 30, 2003

The outcomes of this project in Phase 1 were:

- Support of the four LBS agencies chosen to explore distance learning for their literacy services, by
 providing the necessary theoretical and practical information on distance delivery and flexible
 learning, including training, resources, proposal development guidance, and other supports in order
 to create a feasible plan for distance delivery in the agency regions
- Support of the four LBS agencies chosen to implement distance learning for their literacy services, by
 providing the necessary theoretical and practical information on distance delivery and flexible
 learning, as well as AlphaRoute training, other professional development activities, and resources in
 order to implement the agencies' distance delivery models

The following goals were met:

- Successful delivery of eight days of training workshops for the four LBS program administrators
- Successful supply of customized e-learning programming resources to the participating sites, providing support and guidance
- Success in helping the four agencies submit draft submissions and final drafts of business cases to MTCU for their distance delivery projects

Phase 1 Deliverables

- A series of flexible learning workshops for pilot participants
- Mini-collection of resources to support distance learning and e-learning for adult literacy
- Evaluation of the usefulness of the information and support provided to the LBS agencies by AlphaPlus

Phase 1 Activities

Project activities during this phase involved coordination, consultation, research, and development work.

Coordination Activities:

- Facilitate and host four working group meetings between July and October 2003
- Provide overview of AlphaPlus Centre's role and support services
- Provide overview of direction of AlphaRoute
- Provide AlphaRoute user training and guidelines
- Explore the AlphaRoute web-based learning environment and how it might support the development of a virtual community of literacy learners
- Coordinate communication and information sharing among the sites through the use of technology
- Invite Contact North/Contact Nord to the table and negotiate role expertise and advice they can bring
- Invite other resource people to the table as required
- Maintain ongoing coordination/communication with sites regarding the development of the model
- Liaise with the MTCU lead and participate in the MTCU flexible learning working group as deemed necessary
- Coordinate and develop initial communications to the field about flexible learning

Development Activities:

- Create a mini-collection²² for distance education/flexible learning. Provide resources and research pertaining to these major areas and present the results in a useful format for participating agencies:
 - · Learning content and varied media
 - Standards for instructional design and practice
 - Standards for assessing and recognizing learning
 - Tools and resources for practitioner support and professional development
 - Technical infrastructure
- Conduct the initial stage of field research, a literature review with regard to flexible learning and distance education for adults; this will provide the background for a larger research implementation and report in Phase 2
- Determine a field research plan
- Contribute to a research framework for participating agencies, in collaboration with MTCU
- Administer user questionnaire near the end of Phase 1 to determine if the support provided was helpful

Phase 2 Outcomes and Goals

December 1, 2003 - March 31, 2005

The outcomes of this project in Phase 2 were:

- The development of a field research plan and the coordination of research activities across the four agencies; the initial stage of field research was carried out and the preliminary results were gathered
- Best practices for AlphaRoute delivery within a flexible approach, both within and outside of the LBS Program
- Continued access for the four distance delivery pilot sites to the necessary theoretical and practical
 information on distance delivery and flexible learning, AlphaRoute training, and other professional
 development activities and resources in order to support the successful running of the sites' distance
 delivery models
- Guidance and support of the development of a community of practice of distance learning coordinators and practitioners
- Data collection from the four pilots and analysis, synthesis, and presentation of the results in accessible formats in the context of the current literature, to inform next steps in Ontario's Flexible Learning Initiative
- Collection of valuable information to inform the enhancement of the AlphaRoute learning environment and its delivery, to support both the Flexible Learning Initiative and the Computer-Based Learning Initiative in Ontario

The following goals were met:

- Successful delivery of two days of training workshops for project coordinators
- Successful delivery of two days of training workshops for project mentors
- Successful delivery of two days of research workshops for project coordinators and mentors
- Providing professional development opportunities through Centra²¹ and on-site

²² A mini-collection is a collection of materials literacy programs can request from AlphaPlus Centre to support their needs for print-based materials including books, manuals, and basic readers, as well as videotapes. Mini-collections range from 20-100 items and are loaned for up to eight months.

²³ For more information on Centra: http://www.centra.com/

- Providing effective communication through email and AlphaCom²⁴, and on-site AlphaRoute training at the four agencies
- Building and enhancing mini-collections of e-learning programming resources, and making them available to the four agencies
- Establishing a research methodology and research plan, presented during the workshop for program coordinators, and beginning the initial stage of field research by implementing all components of the research framework before program delivery
- Publishing a research report reviewing project activities and analyzing research data, followed by recommendations for best practices, model implementation, policy development, and future research in flexible learning

Phase 2 Deliverables

- Field research plan
- Preliminary results from first stage of research
- Professional development workshops addressing research, mentoring, programming issues, challenges and successes, and the support of community-building for distance learning
- Mini-collections for pilot programs to use in a blended learning approach to distance learning
- Literature review of flexible learning/distance learning summarized in an accessible and useful report for the literacy field
- Research report reviewing the project and analyzing the research data
- Results of a preliminary scan of the needs of and potential for distance learning in the Deaf community

Phase 2 Activities

Project activities during this phase continued to involve coordination, consultation, research, and development work.

Coordination Activities:

- Coordinate communication and information sharing among the sites through the use of technology
- Facilitate and host three working group meetings (the focus to be decided in consultation with piloting agencies)
- Provide overview of AlphaPlus Centre's role and support services to new members (such as mentor coordinators)
- Provide AlphaRoute user training and guidelines on-site to agencies
- Provide orientation, guidance, and ongoing support in developing a community of practice for mentors and a virtual learning community for AlphaRoute learners
- Invite key people to consult on the project and to share information with piloting agencies
- Maintain ongoing coordination/communication with agencies regarding the implementation of their models
- Maintain ongoing communication with agencies regarding AlphaPlus resources to borrow and purchase to support distance delivery
- Maintain ongoing communication with agencies regarding supplementing AlphaRoute (for example, using specific websites with AlphaRoute activities)
- Coordinate agency research activities with project research activities

²⁴ For more information on AlphaCom: http://alphaplus.ca/alphacom.html



- Liaise with the MTCU lead and participate in the MTCU working group as deemed necessary
- Coordinate and develop initial communications to the field about flexible learning

Research and Development Activities:

- Gather information from piloting agencies on resource needs
- Create a mini-collection of instructional resources for distance education/flexible learning in a variety of media (software, print materials, videos, et cetera) reflecting the needs and requests of the piloting agencies
- Provide research information pertaining to these major areas:
 - · Learning content and varied media
 - · Standards for instructional design and practice
 - Standards for assessing and recognizing learning
 - Tools and resources for practitioner support and professional development
 - Technical infrastructure and technical supports
 - Support requirements for learners and retention strategies
 - Agency infrastructure (cost-effectiveness, partnership building, et cetera) and present the results in a useful format for participating agencies
- Conduct the initial stage of field research; determine a field research model, in consultation with the independent research consultant
- Complete a literature review with regard to flexible learning and distance education for adults
- Contribute to a research framework for participating agencies, in collaboration with MTCU
- Administer user questionnaire near the end of Phase 2 to determine if the support provided was helpful

Appendix F. Data-Gathering Instruments

Common Intake Instrument
"Is Distance Learning for Me?"
Learner Self-Management Survey
Learner Technical Skills Survey
Literacy Skills Assessment
Exit Interview
Staff Log
Learner Log

Common Intake Instrument

Enr	ollment date:
Lea	rner number:
Age	E 16-18 C 19-26 C 27-39 C 40-60 C 60+
Ger	nder: GMG F
Firs	t language: English French C Other
Emi	Employed part time Employed full time Not employed
_	hest grade level achieved: 1-3
Rea	Trouble getting to an on-site LBS program Family obligations Job schedule conflicts Prefer to work at own pace Discomfort with structured classroom setting Other:
Hov G G G	v long ago was the last time when you went to an adult education class? Does not apply Less than 1 year ago 1-2 years ago 3-4 years ago
	5 or more years

For	how long did you attend this class?
	Never
	For less than 1 year
	For 1-2 years
	For 3-4 years
	5 or more years
	you currently in any other Adult Education Class? Yes No es, please specify the name of the previous Adult Education Program:
Wh	at is your main goal in entering this program?
	Find a job or keep your job
	Further training or education
	Personal independence
	out you being in this program, would you say your family and/or friends are: Supportive Fairly neutral Not supportive you prefer: Working on your own Working with others you prefer: Receiving specific direction/instruction
	Figuring things out for yourself
Pro	"Is Distance Learning For Me?" (Adapted from Kentucky Virtual High School) urner number: gram:
Hav	ring face-to-face interaction with my instructor is not particularly important to me

	somewhat important to me
	very important to me
Cla	ssroom instruction is
	rarely helpful to me
	sometimes helpful to me
	almost always helpful to me
Wh	en a teacher hands out directions for an assignment, I prefer
	figuring out the instructions for myself
	trying to follow the directions on my own, then asking for help as needed
	having the instructions explained to me
l ne	eed teachers to continually remind me of due dates and assignments
	rarely
	sometimes
	often
I co	ould spend about the following amount of time each week studying and working on my
owr	
	1-2 hours
	3-4 hours
	5-6 hours
	7-8 hours
	9-10 hours
	11-12 hours
Му	feelings about using computers and technology are:
	I do not know much and do not care
	I do not know much but am willing to learn some
	I know some and want to keep learning
	I enjoy using technology and want to keep learning
l wo	ould say that I organize my time and priorities
_	not very well
	not very well slightly worse than average

	quite well
	very well
Hov	v important is it to you to take this course?
	Very important: my future goals depend on this course
	Important: I am interested
	Not essential, I can wait or have other options
-	family or those I live with
	are opposed to my taking this kind of class
	do not really care whether I take this course or not
	are somewhat supportive of my taking this course
	are excited and supportive of my taking this course
At h	ome, I have
	no real place to study
	a place that I can study sometimes with some interruptions
	a relatively quiet place to study
	my own study place
Do <u>y</u>	you have access to a computer in your home?
	Yes
	No
Do	you have Internet access in your home?
	Yes
	No
	Loomon Calf Managament Cumiau
	Learner Self-Management Survey
Lea	rner number:
Prog	gram:

Following are some questions for you to answer about yourself. These are to help us to measure the effectiveness of our program in meeting your needs. Please answer honestly. Your survey will not be shared with anyone and will be used for data purposes only.

How well do you think you:	Wel	I Fair	Poorly
Stay focused or concentrate on what you are doing?	E	Б	E
Stick with a task or problem?	С	E	E
Figure things out for yourself before you ask for help?	E	Е	E
Ask for help when you're stuck?	E	Б	E
Make decisions for yourself?	E	Б	E
Solve problems by yourself?	Б	Е	E
Feel you can do things and accomplish things?	С	E	E
Organize your work and life?	Б	Е	E
Learn things on your own?	Б	Е	E
Set goals for yourself?	С	E	E
Manage your time?	С	E	E
Evaluate your own progress and how you are doing?	С	E	E
Try or learn new things?	С	Б	E
Can learn on your own without help?	E		E
Accept responsibility for yourself?	E		E
Seek constructive criticism of your work?	E	E	Ε
Try to actively try new things?	С		E

Learner Technical Skills Survey

Learner number:					
Program :					
Date: - (Plea	se click o	n the icor	n and pic	k a date))
Does the learner have computer access at home?		Yes 🗖	No		
Does the learner have Internet access at home?	E	Yes C	No	_	
Does the learner have computer access outside of home?	the E	Yes C	No		
If yes, please explain:	7				
_	<u> </u>				
√	7				
Does the learner have Internet access outside of the home?	ne 🖺	Yes C	No		
Does the learner know how to use voice mail?	E	Yes C	No	-	
Does the learner know how to use a fax machine?	E	Yes C	No		
Please read the Instructions (in PDF format) befo	re filling i	n the follo	wing.		
Based on the descriptions in the attached PDF doc indicates what user profile best suits this learner for					that
Please note: Some learners may have more experstudent does not have the majority of skills describ "No experience" for that particular component.					
Component	No experienc	New e usei		mediate user	Confident user
General computer usage					

Start-up skills

Using CD-ROMs

Keyboard and mouse skills

Handling computer problems

4

Windows, programs, and files				
Windows	Ε	G	C	E
Programs - launch and close	Ε	G	Б	Е
Programs - features and files	Ε	E	E	E
Internet usage				
Connectivity	Œ	G	E	E
Web browser	Œ	G	G	E
Email	Ε	G	Б	Е
Interactive communication tools	E	E	6	E
Overall	E	E	E	C
Comments:				

Literacy Skills Assessment

This form must be completed <u>twice</u>, once at the beginning and once towards the end of program delivery to the learner during both data collection phases (April-July, September-December). Please note that learners have to have spent a minimum of 25 instructional hours of direct contact with a teacher/mentor before the literacy skills assessment should be conducted for exit assessment purposes. However, <u>every learner should be assessed</u> upon leaving the program and the results reported using this form even if the minimum amount of instructional hours of direct contact with a teacher/mentor have not been met. Make sure to <u>indicate the amount of hours</u> of direct instructional contact a learner has completed with a teacher/mentor at the time the assessment it taking place.

Learner number			
Program :	•		

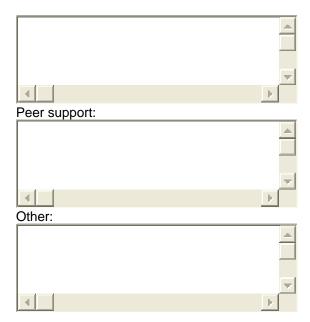
Date: <- (Please click on the icon and pick a date)
Face-to-face assessment
Assessment via telephone
Other:
How many instructional hours of direct contact with a teacher/mentor has the learner completed learning literacy skills at the time of the assessment?
Indicate the assessed literacy levels of the learner upon intake or exit assessment using CABS in the categories below. Please provide a detailed anecdotal account of the strengths and weaknesses of the learner in each skill areas.
Reading: Level 1
Please comment on strengths and weaknesses of the learner:
₹
Writing: Please comment on strengths and weaknesses of the learner:
Numeracy: Please comment on strengths and weaknesses of the learner:
Exit Interview
Learner number: Program:

This document is intended to guide practitioners. Please administer in a very accepting way. It is suggested that an attitude of "you can help us learn about our program" be communicated. Please provide as detailed information as possible to all questions.

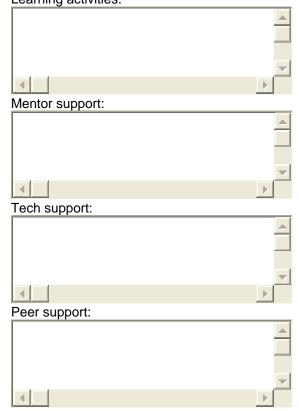
The exit interview should be done when the learner is leaving the program, or when the program is interrupted temporarily due to a major holiday.

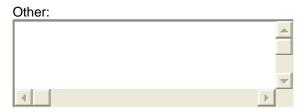
1.	Please select a	ain reason for leaving th nd comment in the spac	e Distance Learning Program? ee provided below:
		ly reached learning goa	I
	Employed		
	Training or	education	
	Other LBS	training	
	Volunteer v	vork	
	The progra	m didn't meet my needs	S
	I didn't like	working by myself	
	Other:		
	4		★
	What are you p	anning to do after leavi	ng the program?
		, and the second	
	4		<u>▶</u>
2.		strengths of the progran nt in the space provided es:	
			V
	Mentor support		
			_

Tech support:



What could the program have done to serve you better? Please comment in the space provided below: Learning activities:

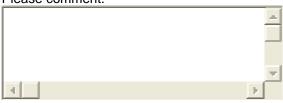




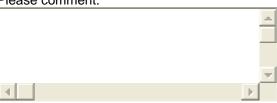
3. What was(were) your goal(s) in this program? Please comment:



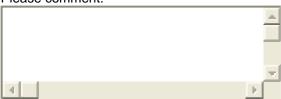
Did you make good progress in reaching your goal(s) set in the program? Please comment:



How do you know that you made progress in your goal(s)? Please comment:



Do you plan to enroll in other adult education courses or programs? Please comment:



Staff Log

The following form is to be filled out by the teacher or mentor at the end of each week. It is meant to be a means of obtaining data to determine the amount of time spent in teaching and support activities.

Staff Number:	
Pilot site:	
No. of learners:	
Week of:	to

Time spent by STAFF in teaching and supporting activities.

Please consult Help before filling in the following in half-hour increments.

Date entered represents ACTUAL NUMBER OF $\underline{\text{WEEKLY STAFF HOURS}}$ BASED ON REPORTS FROM PILOT SITES - BY INDIVIDUAL STAFF

Interactive literacy training contact hours	Hours
Email	
Online	
Phone calls, video conference	
Face-to-face instructional time (at learner's home)	
Face-to-face instruction at agency	
Learner observation (helping learners when needed)	
Other contact hours with learners	Hours
Intake assessment	
Orientation including computer skills training	
Training plan development	
Logging learner hours	
Ongoing/exit assessment	
Follow-up activities (phone calls, interviews)	
Learner retention activities	
Non-instructional contact hours	Hours
Lesson prep including learning activities & assessment tools	
Outreach & recruitment	
Staff development	
Tech support	

Travel	
Management/administration	

Learner Log

The following form is to be filled out by the teacher or mentor at the end of each week by talking with the learner. It is meant to be a means of obtaining data, helping the learner to track and take pride in their own work, and provide an opportunity for the teacher/mentor and student to dialog about that week's work.

Learner Number:	
Pilot site:	
Week of:	to

Time spent by STUDENT in learning activities (independently & interactively).

Please read the Definitions of Terms used for data collection (in PDF format) before filling in the following in half-hour increments .

Date entered represents ACTUAL NUMBER OF <u>WEEKLY HOURS PER STUDENT</u> BASED ON REPORTS FROM PILOT SITES - BY INDIVIDUAL STUDENT

Independent learning	Hours
Print materials	
Video materials	
Software/CD materials	
Web site materials	
Self-assessment	
AlphaRoute learning activities	
Tuphartoute learning detivities	
Interactive learning	Hours
	Hours
Interactive learning	Hours
Interactive learning Email	Hours
Interactive learning Email AlphaRoute Café	Hours

Study group	
Telephone	
Orientation and learner self-reporting	Hours
Orientation including computer skills training	
Self-reporting (logs)	
Administrative activities	

Appendix G. AlphaRoute Features and Trial Access Information

Registration Centre

Agencies that deliver AlphaRoute, and that have received training from AlphaPlus, use the password-protected web-based registration tool to register their learners and mentors to use AlphaRoute. The Registration Centre has features that enable programs to manage their learner and mentor access to, and use of, AlphaRoute.

Mentor Toolkit

Mentors have their own specially designed web-based tool, the Mentor Toolkit, with which they can access all the tools and resources needed to serve as effective mentors. Using the toolkit, mentors can view and respond online to their learners' completed AlphaRoute activities, including learners' individual Word Lists.

Tours

The Welcome and Info desk on the portal and the "i" link in the Resource area present learners with four guided tours, complete with audio support. The site overview tour gives a tour of the AlphaRoute portal. The other three tours guide the student through the Resource Centre learning environment.

Mouse and Other Games

Found on the signpost on the portal and within the Resource Centre under the More Stuff button, a series of mouse practice games are included in AlphaRoute. Two of these games, the Hamburger Game, and Mouse and Memory, were developed during 1996/97 and are the only original AlphaRoute activities remaining on the site. Added to these two games are Jigsaw Puzzles, a Sliding Puzzle, and two versions of Yacht, a numeracy game.

Word Games

Found on the signpost on the portal and within the Resource Centre under the More Stuff button, Word Games presents learners with levelled Word Searches and Crossword Puzzles. Each game includes instructions and a movie to show learners how to complete the games.

Worksheets

The Learning Connection link found on the signpost on the portal, which is also linked to the More Stuff button in the Resource Centre area, presents learners with a series of downloadable worksheets to complete via handwriting and faxing to their mentor. Answers to the worksheet activities are also presented to learners, enabling them to score their own work.

Newspapers

These web-based activities are presented in the format of newspapers in the AlphaRoute portals. During the course of the research project reported on here, four English newspapers called *The Learning Edge* and one French newspaper called *Le Scribouillard* could be accessed by clicking on the newsboy icon on each portal. There was also one Aboriginal newspaper called *The Northern Edge*, accessible from the raven icon located on top of the signpost in the Aboriginal portal. As of May 2005, five *The Learning Edge* and five

The Northern Edge English newspapers can be accessed from the newsboy and raven links to newspapers. An index of the articles in all ten newspapers has been added as well. The newspapers are supported by full audio and present mainly self-scoring activities that range in topic from health to numeracy to computer skills. Some activities invite students to write stories to be sent to their mentors.

The Employment Building: Skills at Work

The red Employment building at the back of the English portal presents learners with interactive activities focused on developing skills in using machines with keypads and numbers – machines found primarily in an office setting. There are eight machines and one activity about e-learning in the context of today's workplaces. Each machine activity includes learning, practice, and testing modules. All are supported with audio and self-scoring, and do not save to the learner's AlphaRoute portfolio.

The Training Building: Demonstrating Your Skills

The activity in the Training building presents students with an introduction to independent learning and to taking control of their learning path. This activity, called Demonstrating Your Skills, engages learners in reflection on how they learn and introduces ways learners can assess whether they are learning and whether they may be ready to demonstrate real-life applications of their learned skills.

Assessment Centre: AlphaRoute Placement Tool

The AlphaRoute Placement Tool is a web-based assessment process learners work through at their own pace to determine when they have reached their skill level. Students are invited to work through a series of levelled reading, writing, and numeracy activities. Mentors must register students to access the AlphaRoute Placement Tool separately from their registration in AlphaRoute. This is because there is assessment of writing and scoring that must be done after the assessment is completed, so programs are advised to stage their learners' access to this part of AlphaRoute. This is the only AlphaRoute area students cannot access at will.

Interactive Tools

The interactive tools are features of AlphaRoute that support and encourage learner-to-learner and learner-to-mentor communication.

The first three features listed below, Chat Room, Cyber Search, and Discussions, are found in the Café area on the English and French AlphaRoute portals, in the Talking Circle on the Aboriginal portal, and in the Kitchen on the Deaf portal.

> Chat Room

One basic chat room, which includes the option for Private Chat, provides learners with a live real-time place to meet other AlphaRoute students from across Canada. Virtual friendships are forged here and learner monitoring of the chat room is learned and assumed. Learner leadership potential is demonstrated here. Not all literacy program sites allow access to chat and so this area is only accessible to AlphaRoute learners and mentors whose program sites allow chat room access.

> Cyber Search

Every two weeks an Internet search activity is presented, with audio and graphical support, to interested AlphaRoute learners. They are introduced to a topic and/or website and are invited to conduct research and to report their findings in the Cyber Search discussion area.

> Discussions

There are three asynchronous discussions in AlphaRoute. All three were designed to provide learners with a place to learn transferable skills and to interact with other AlphaRoute learners.

The **Cyber Search and the Internet** discussion is a place to post the results of Cyber Search research activities. It is also a place to share information on interesting websites. Learners can practise cutting and pasting web links and share web-based learning sites here, providing peer-to-peer support.

The **Writing Club** discussion is a place for learners to share their writing with other learners. In the English area, it has become a place for learner organizing and leadership. At times it has been moderated by program staff and learners on a short-term basis while focusing on a theme, such as poetry.

The **Questions for the Webmaster discussion** provides a place for learners to report problems with AlphaRoute and to ask for accountability as to why some areas cause problems and or why the site may be down at times. This is provided so students will learn that on most websites there is a way of communicating with the site developers to ask for help and to make comments.

At times the discussions are used to deliver short four-week-long web-based courses for learners to register for and participate in. Essential skills learned and used during a course are tracked and learners receive a certificate of participation upon successful completion.

> Email

All AlphaRoute learners and mentors are set up with an AlphaRoute email account upon registration in AlphaRoute. AlphaRoute email is a closed system, accessed only by AlphaRoute users, and provides learners and mentors with tools to communicate. An address book feature is currently in development.

> Resource Centre

Web-based learning activities presented at LBS Levels 1 through 5 are found in the Resource Centre. These activities, developed over eight years, reflect the growth in knowledge and in technical possibilities of presenting web-based activities in ways that are increasingly interactive. There are currently 227 activities in the English Resource Centre, 20 in the Aboriginal Resource Centre, and 92 in the French Resource Centre. The activities found in the Resource Centre area of the AlphaRoute portals are the only activities for which results are saved to the learner's portfolio. Activities at Levels 1 and 2 provide audio support to learners. Activities cover the Communication and Numeracy domains for English and French learners, and Self-Management/Self-Direction for learners accessing through the Aboriginal portal. Activities at Levels 1-3 tend to be self-scoring, giving learners immediate feedback and the opportunity to repeat the activity, as often as desired, to achieve the result the learner deems adequate. Activities at higher levels require more writing and Internet research. On the Deaf portal, there are learning activities for Level 2, presented in the format of The Deaf Star newspaper.

Learning Support Features

These activities are located in the Resource Centre and are the oldest AlphaRoute activities. They were developed within a defined framework that included the activity instructions, the activity screen area, and the learning support features. Learning support features found in this area are listed below.

> Notepad

The Notepad is a pop-up window that presents learners with a place to record and save private information within the learning environment of AlphaRoute to support their web-based learning. Some AlphaRoute activities invite learners to save notes on their Notepad, so the notes can be shared with their mentor at a later date.

> Word List

Many adult literacy learners keep personal lists of new words learned, for vocabulary building and/or spelling support. The English and French Word List features in AlphaRoute enable learners to add, edit, and delete words on a list that displays alphabetically. Mentors can access their learners' Word Lists from the Mentor Toolkit to enhance learning through mentor-initiated writing assignments, spelling dictations, or dictionary practice. As an added bonus, the Word List is displayed with an interface and features similar to a web search, including multiple pages for listings. This provides learners with additional transferable skills for using web search engines.

The Aboriginal Word List provides more of a personal dictionary option, where learners can add words and definitions.

> Dictionaries

AlphaRoute presents learners with a listing of titles of print-based dictionaries, as well as links to web-based dictionaries, assessed to be appropriate for the AlphaRoute Resource Centre level the learner is currently at. Learners may find the print-based recommendations in their program resource centre, at a local library, or in a bookstore for purchase. In some cases, titles are presented for dictionaries that are available as software. Learners are free to explore web-based dictionaries to support their online learning. As well, web-based dictionaries often have free learning activities that support vocabulary development and spelling skills, which AlphaRoute learners can access as extended web-based learning resources.

> Portfolio

The AlphaRoute learner portfolio is now six years old. At the time of its initial development, it was innovative and exciting. In its current form, it provides learners and mentors with a record of learning activities found within the Resource Centre. The learning record includes the date and time activities were completed, a listing of the answers chosen by the student during the course of the activity, and a percentage score if the activity was self-scoring or a letter score if the mentor needs to provide feedback on writing done within an activity. Within the portfolio area, mentors can leave learners a text message for each activity completed. AlphaPlus is exploring new possibilities for the learner portfolio, including an e-portfolio.

Mentor Desk

Located on the English and French portals as a desk icon beside the Resource Centre, and on the Aboriginal portal as an icon of a person in a canoe, the Mentor Desk provides phone, fax, and email connections for the learner to their mentor. Mentors have the option of including their photo in the Mentor Desk. The Mentor Desk can also be accessed from the Resource Centre area using the "M" button.

Links to other AlphaRoute Sites

On the English, Deaf, and Aboriginal portals, active links take learners to any of these three AlphaRoute portals. The French portal stands alone, not linked to the others, because of the difference in language.

Links to the Web

Since May 2005, a new area called Links to the Web has opened on the English and French portals. Three themed areas are presented with relevant subjects and learner activity web links.



Resources, technologies, and research for adult basic education Ressources, technologies et recherche pour l'éducation des adultes

2040 Yonge Street, 3rd Floor, Toronto ON $\,$ M4S 1Z9 $\,$

Tel: TTY: Fax:

Email: info@alphaplus.ca Web site: www.alphaplus.ca