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





Background

Background of the Project

Distance learning and flexible delivery of Adult Basic Education (ABE) programs present great potential for addressing a variety of barriers often experienced by adult learners who require literacy learner support. These barriers, or great divides, include significant distances to existing services, child care needs, work schedule restrictions, lack of enrolment space in on-site programs, needs for learning at a different pace or on a different schedule, discomfort or lack of confidence when participating in large groups, and more.

With continued support from the Ministry of Training, Colleges and Universities (MTCU)¹ and the Human Resources and Social Development (HRSD)², this project explored possibilities for distance and flexible delivery of the Literacy and Basic Skills (LBS) Program³ in the Province of Ontario, Canada. The project has been carried out in two main phases to date. In Phase I (July 2003 to November 2003), termed the Preparatory and Planning Phase, sites were selected to participate, staff was hired, business plans were developed, community and potential learner profiles were established, partnerships were established, staff training was begun, a research design was formulated, and other preparatory activities took place. In Phase II (December 2003 to March 2005), termed the Implementation and Research Phase, orientation activities were held, instruction began, pre- and post-assessments⁴ were administered, learner progress was monitored, program adjustments were made, and staff development was continued. Phase III, consisting of more standardization of requirements and broader delivery of services to a wider spectrum of learners, is proposed in the Recommendations section of the full report.

AlphaPlus Centre

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.

For this project, AlphaPlus Centre has coordinated the research and provided the MTCU with research results to inform policy and practice in distance learning on an ongoing basis. AlphaPlus Centre has also provided ongoing support to the pilot sites, including professional development, resource distribution, and training and support for using AlphaPlus' online learning environment, AlphaRoute. AlphaPlus has also coordinated communications across the pilot sites and provided participants with training and support for using Centra, virtual meeting software, in an attempt to create the beginning of a "community of practice" for distance learning in Ontario.

¹ For more information on MTCU: http://www.edu.gov.on.ca/eng/training/training.html

- ² For more information on HRSD: http://www.hrsdc.gc.ca
- ³ For more information on LBS: http://www.edu.gov.on.ca/eng/training/literacy/main.html
- ⁴ Pre- and post-assessments were administered before and after "instructional hours" totals of 25 hours for distance learners, and 100 hours for onsite learners.

⁵ For more information on AlphaPlus Centre: http://alphaplus.ca

Four LBS programs were selected to participate in this study:

- Formation multi-modale en alphabétisation et formation de base (Multi-mode Training at the Literacy Level) of *Centre de formation pour adultes J'aime apprendre inc.* in Cornwall and Alexandria
- The Distance Delivery Development project at Kingston Literacy (CLCN [Community Learning Centre Napanee]) in Napanee, Tamworth, and Kaladar
- Sioux-Hudson Literacy Council's Good Learning Anywhere (GLA) project consisting of three pilot groups: Pikangikum, First Nations Management Training (FNMT) in isolated Aboriginal communities in Northwestern Ontario, and Hudson
- Confederation College's LBS Distance Delivery project in Thunder Bay, Kenora, Onigaming, and Grassy Narrows

Across these four programs, 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 of 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.



Centre de formation pour adultes J'aime apprendre inc.

J'aime apprendre focused on improving accessibility and providing more flexible options for literacy learning services to Francophone communities in the region of Cornwall. Adults with transportation and scheduling difficulties accessed online learning resources from their homes and from the on-site computer lab. Mentors provided learner support by phone and email. Face-to-face group meetings were organized in learners' homes. A partnership was formed with a literacy program in the neighbouring county of Alexandria to offer access to distance learning resources for adults in that county as well. Using online learning and printbased resources, 29 adults, most with higher literacy levels, were able to work toward improving their literacy and technology skills.

Kingston Literacy (CLCN)

CLCN provided literacy learning to 23 adults in Southeastern Ontario who were in need of life and literacy skills but who had difficulty accessing regular programs due to transportation and scheduling problems. Strong community connections were forged through public institutions such as local schools, community programs, and social assistance programs, and through corporate sponsors, to assist in learner recruitment. Adults in the areas of Tamworth and Kaladar accessed online learning resources from their homes, assisted by mentors who connected with them through phone calls and in-person visits on a weekly basis. Learners in Napanee generally came to the centre in Napanee to use the computer lab and connect with their mentor. In co-operation with CLCN, a control group of twenty learners was established for data comparison with the group of distance learners in terms of learner progress and staff hours.









Sioux-Hudson Learning Centre

Sioux-Hudson Learning Centre provided literacy programming to 52 adult learners in a large area of Northwestern Ontario, including rural communities within driving distance of Sioux Lookout and remote communities north of Sioux Lookout: Hudson, a rural community with many adult learners who had difficulty accessing regular literacy programs due to transportation and scheduling issues; Pikangikum, an Aboriginal fly-in community with many young adults who dropped out of school; and a number of isolated Aboriginal communities that are part of the FNMT program, whose participants benefited from literacy skills upgrading. Depending on barriers to overcome and available resources, learners connected with their peers and mentors face-to-face, by telephone, and through web-based communication tools.

Confederation College

Confederation College, Thunder Bay, developed a delivery model for adults in need of literacy basic skills upgrading as a requirement of social assistance programs and for adults considering postsecondary education. In Thunder Bay, learners participated in the program from their homes, supported by the mentor through the use of emails, phone calls, and face-to-face meetings. In partnership with social assistance programs, adults were given the opportunity to upgrade their literacy skills as part of the employment skills program in a drop-in centre located in a shopping mall. In Kenora and the rural Aboriginal communities of Onigaming and Grassy Narrows, learners generally accessed online learning in a computer lab, complemented by other resources. A control group of 13 learners was formed for the purpose of learner progress comparisons between on-site and distance learners. Another control group of 47 on-site learners was surveyed on preferences in relation to on-site and distance learning environments. Overall, 45 distance learners benefited from this project.

AlphaRoute

AlphaRoute

AlphaRoute⁶ is a password-protected web-based learning environment for adults who want to improve their reading, writing, math, and computer skills to achieve their goals. AlphaRoute offers anytime-anywhere access to learning and can be integrated with other e-based and print resources. AlphaRoute can be incorporated into face-to-face instruction, distance learning, and flexible program delivery, as it offers tools for virtual mentoring, opportunities for independent and group learning, and skill-building activities to meet a variety of learning goals. Literacy agencies attempting to meet the learning needs of adults in isolated communities and of adults whose family and employment commitments prevent them from attending a literacy program full-time, as well as agencies offering on-site programming, can all benefit from access to AlphaRoute as a learning resource.

AlphaRoute offers: interactive learning activities developed specifically for adult learners; learning management tools with personalized training plans, activity lists, portfolios, and learning tools such as personalized notepads and word lists; easy-to-use communication tools such as email, discussion groups, and chat; special content areas for workforce literacy, numeracy and technology, self-assessment, Internet search skills, and useful web links. AlphaRoute is accessible to learners in English and American Sign Language and also offers Aboriginal culture-based content. For French speaking learners, AlphaRoute provides a Frenchlanguage learning environment.

AlphaRoute as a web-based learning environment was a common requirement and blended learning⁷ element in the development of the distance learning models for this research. For a more detailed description of AlphaRoute and its features, please refer to the main body of the report and to the *Appendix AlphaRoute Features and Trial Access Information*.

"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."

- ⁶ For more information on AlphaRoute: http://alphaplus.ca/alpharoute.html For a free three-day trial: http://english.alpharoute.org/index.html?Access=trial
- ⁷ "Blended learning is learning that employs multiple strategies, methods and delivery systems." (The Node Guide to Blended Learning, 2001) http://www.thenode.org/guides/blended/blended.pdf

Research Design

"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."

Research Design

Interested literacy agencies submitted applications to participate in the project. After a thorough review, MTCU selected four sites representing a variety of locations and target populations to participate in the project and the associated research. These four project sites were provided with assistance in developing business plans and program delivery models, and in doing thorough needs assessments of their communities and learners to be served.

After an initial period for each site to formulate a program, hire staff, and develop a business plan, each site began to implement instructional programs. Each site then proceeded to initiate the recruitment of learners, the design of orientation processes for incoming students, and professional development for teaching and support staff.

Following the development of its recruitment plan, each site began to recruit and enrol students. Each learner was given a number of intake and pre-assessments to determine the learner's demographic profile, academic skills levels, and readiness to engage in distance learning and the use of 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 *Literacy Skills Assessment form*.

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

Research Design

Following initial assessments, learners began their course of study in the program. Various methods of instructional delivery were used at different sites. Sites were given latitude to determine the method of instruction, form of teacher-learner interaction, and mode of student independent activities to be used. All programs monitored learner progress, offered continuous instructional support and advice, and made adjustments in their program delivery as they learned more about the profiles of their learners and about their learners' unique needs.

During the course of the program, staff kept logs of the time spent on 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. Staff time was tracked in three general categories:

- Interactive contact with learners, such as emails, 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

After completing approximately 100 hours of instruction, learners were given post-assessments in literacy and technical skills to determine progress in each of these areas. The 100-hour threshold ensured all learners were assessed after the same amount of "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]."

Research Design

"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." instruction. This threshold was chosen because it is a common time frame used in other adult literacy program assessments⁸.

Finally, upon completion of one data collection period, or if a learner left the program prior to the end of a term, an exit survey was administered to determine the reason for leaving and to gain feedback about program strengths, weaknesses, and effectiveness.

As part of the program evaluation, interviews with practitioners and learners at the project sites were also conducted. Throughout the project, feedback and data were also forthcoming from the project agencies via group meetings, staff development sessions, monitoring by AlphaPlus, and other less formal contact.

To provide additional comparison data, two small control groups were chosen for this study: one group at Confederation College and one at CLCN. Control group learners were administered intake surveys, pre- and post-assessments of literacy skills, and technical skills assessments. The control group learners were engaged in activities at the same literacy level as project learners and were assessed according to the same parameters, after the same amount of time.

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

⁸ Porter, P. and Woolley, V.M. (2002). Third party project evaluation: Adult education innovations and alternative instructional delivery program. Los Angeles Unified School District: Division of Adult and Career Education."

Results

Results

The project and accompanying research yielded a great deal of valuable information as well as data and trends that can be used in future project stages. The pilot study found distance delivery is a viable option for serving students who are not otherwise able to attend traditional programs or who are in more isolated areas. The study also found that, with proper support and training, distance learners can use technology as a valuable adjunct and can make good learning progress with some level of teacher contact and support. Significant results include those related to:

Distance learner demographic profiles. Distance learners in this study did not differ significantly in their demographic profiles 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 for low literacy levels. Distance learning can be an effective tool for learners with relatively low levels of literacy.

Problem solving and independence. Distance learners appear to have slightly higher preferences for working on their own and for using self-problem-solving strategies.

Long-term acceptance. Distance learning must be sustained over time to become established and accepted in rural and isolated communities.

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.

Personal interaction. Personal interaction and some face-to-face contact between teacher and learner are important even in distance education.

Instructional preparation. Distance delivery teachers need to spend much more time than traditional program teachers on management tasks to prepare for instruction. "You've given me hope. After five years of looking, I thought there was no hope.You've given me hope!"

Results

"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." Word of mouth recruitment. Recruitment and retention strategies must be linked to personal contacts with key community members and to direct meetings with learners.

Retention and orientation. Retention is related to strong orientation programs and to learners establishing a close relationship with the teacher.

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. 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. Provision of a stable and ongoing funding base is desirable so staff turnover and retraining are minimized in this somewhat complex field.

Business and infrastructure. Agencies entering into the delivery of distance learning need to provide a business plan that includes addressing technology and infrastructure issues.

Computer/Internet access. A high level of access to computers and the Internet among learners was reported, although the quality and speed of Internet connectivity varied.

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

Conclusions and Recommendations

Conclusions and Recommendations

Opportunities for non-traditional LBS learners. Effective distance delivery models, which meet the needs of learners in rural and isolated locations, have been identified in this project.

No cost savings. The cost of distance delivery is comparable to on-site delivery. It can be viewed as an innovation in terms of providing more flexible literacy learning opportunities.

Learner profiles. Surveys to inquire about a learner's suitability to distance delivery methodology need to be developed to accurately predict distance learner success.

Involvement of organizations within the community. Significant barriers can be overcome by focusing on the needs of learners and their communities.

Expansion of distance learning to other settings. Delivery and expansion of distance learning options for learners across the province is recommended to continue. This process of experimentation and expansion has been successful with other innovators in distance learning.

Use with low literacy level learners. Distance learning can be an effective tool with low-level literacy learners.

Technology as a tool. Technology can be used successfully in delivery of instruction and can be an effective tool for adult learners, including those with low levels of literacy.

Next steps. It is recommended Ontario's Ministry of Training, Colleges, and Universities continue distance delivery of Literacy and Basic Skills Program by sponsoring current and new sites, with emphasis on:

- The required number of learners served at each project site, to facilitate practical budget implementation issues
- 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
 - > Learners in school board settings
 - > 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



Conclusions and Recommendations

Control groups more focused. Identify control groups earlier in the project and match them more carefully, paying attention to demographic factors.

Monitoring change in family and social environments. Research the impact of the availability of distance literacy learning on families and communities.

Common literacy skills assessment. Use a common literacy skills assessment instrument at all sites to facilitate more accuracy in tracking learner progress.

Potential with job training programs. Explore offering distance delivery in conjunction with established programs where a partnership and previously identified need are present.

Mentor model. Consider using existing project agencies to mentor new agencies interested in distance delivery.

Matching of delivery model to learner needs. Allow the design of local programs to match the needs of local learners and communities.

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
- > Recruitment funds
- > Greater need for orientation programs, technology support, and partnerships

Other delivery methods. Encourage other methods of learner-instructor interaction and program delivery.

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 BYU.

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.

This research study was made possible with generous support from the Ontario Ministry of Training, Colleges and Universities (MTCU), and the Human Resources and Social Development (HRSD).

(♥) Ontario

Human Resources and

Ressources humaines et Social Development Canada Développement social Canada



This summary is based on a full research report, *Crossing the Great Divides:* Distance learning and flexible delivery in Adult Basic Education. For a copy of the research report contact:

AlphaPlus Centre

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

Telephone: (416) 322-1012 or 1-800-788-1120

TTY: (416) 322-5751 or 1-800-788-1912

Fax: (416) 322-0780 or 1-800-788-1417

Email: info@alphaplus.ca

Web site: http://alphaplus.ca

The full research report and an electronic version of this document is available on-line. in PDF format, at: http://distance.alphaplus.ca

© Centre AlphaPlus Centre ISBN: 0-9733278-8-X August 2006