

# LEARNING TOGETHER

with Digital Technologies



## ILLUSTRATIVE CASE STUDIES



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<http://www.laboureducation.org>

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# THANK YOU

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Thank you



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Labour Education Centre students participate in a computer session.

## Introduction

This report is an account of a short-term project undertaken by AlphaPlus as part of its annual business plan activities (2011-2012). The project was conducted in partnership with four self-selected, community-based, adult literacy agencies in the Greater Toronto Area (GTA). The project is intended to generate a better sense of how staff, volunteers and students in literacy agencies are working with digital technologies, and to better understand the opportunities and challenges presented by digital technologies in adult literacy teaching and learning.

For more than a decade now AlphaPlus has provided support to the adult literacy field in relation to the effective integration and use of digital technologies. We at AlphaPlus believe deeply in the value of digital technologies in delivering adult education and in the transformative potential of digital technologies in adult learning and teaching. For us, issues of access, equity and equality are bound up with the use of technology tools. We believe that all students in adult literacy programs should have the opportunity to learn about, to learn with, to use and to master the digital technology tools that are now common in our world. We are also convinced, based on a growing body of research, that students at all levels of learning can use digital technologies and that the use of digital technologies in learning leads to measurable learning gains.

For the purpose of clarity, we use the term digital technologies to describe, in the most comprehensive way, technologies that can be accessed anywhere, anytime.

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By referring to digital technologies, one accommodates the evolution of a suite of integrated digital technologies that can be accessed virtually anywhere, anytime. They are far more than just a few discrete technologies. Rather, it is about the use and impact of an ever-evolving suite of increasingly integrated digital technologies conceptualized as part of a digital ecosystem that can be adapted, based on needs and context. To illustrate, the smart phone, viewed as a digital technology, rather than a discrete technology, can be used as a phone, a camera, an MP3 player, or computer, or any blended combination of those functionalities, and in seamless conjunction with other digital technologies. In this way, digital technologies become defined in terms of the user's need and context, shaping the ways in which the digital applications are used in multiple ways and with multiple digital applications.

(Lee and Finger, 2009)

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## Background

As part of our work in digital technologies, AlphaPlus learns about and uses a range of technology tools to develop resources such as Moodle courses, our website, our blog, Tech Podcasts, webinars, and Index to Web resources. These technology tools carry our message about the potential for digital technologies to positively impact and transform teaching and learning to the adult literacy field.

AlphaPlus has also undertaken and sponsored research to look at various aspects of, and issues in, the use of digital technologies in adult literacy teaching and learning. In short, over the years we have used digital technologies extensively and conducted and learned much from research. We have also developed and disseminated digital technology resources and information, and we have talked a lot and thought deeply about its use.

Although over the years we have worked closely with many adult literacy programs across the province, we wanted to look more closely at the realities of using digital technologies for adult literacy teaching and learning.

We decided that it was time for us to step out of our own environment and learn directly with and from adult literacy practitioners and students about their lived experiences using digital technologies. But how were we to do this?

With a limited budget and time, we decided that while we could not do all that we wished to do, we needed to make a start. We decided that we would invite programs in our closest learning network, the Metro Toronto Movement for Literacy (MTML), to engage with us in our effort. We contacted MTML staff and asked for their support and assistance in recruiting four programs that deliver Literacy and Basic Skills (LBS)<sup>1</sup> programming to participate in a small, time-limited observation study. MTML sent information about the study to all of its members and announced the study at the Local Literacy Committee (see Appendix 1 for the flyer we disseminated to programs through MTML).

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<sup>1</sup> [http://www.tcu.gov.on.ca/eng/document/brochure/basicSkills/literacy\\_EN.pdf](http://www.tcu.gov.on.ca/eng/document/brochure/basicSkills/literacy_EN.pdf)

We saw this project as a series of partnerships in which AlphaPlus staff would experience the realities of digital technology use on the ground and where program staff and participants could call on an AlphaPlus staff person for support, advice and assistance in the use of digital technologies.

Four community-based adult literacy programs expressed an interest in participating in our study. We contacted each program to describe our intentions and to discuss the process. We then drew up an agreement with each of the four programs, outlining timelines, dates and hours of attendance in programs, type of assistance that we would offer, issues related to confidentiality and the role of AlphaPlus staff in the programs (see Appendix 2 Sample Letter of Agreement).

Having made agreements with each of the four participating programs, we developed a schedule of visits with each. An AlphaPlus staff person was assigned to each program to observe and document the use of digital technology in each case and to negotiate what supports each program was looking for from AlphaPlus. Each program was unique and had different needs and priorities. AlphaPlus staff attended the programs for a maximum of 7 hours per week over a 16-week period between October 2011 and March 2012. Notes and records were maintained in a closed AlphaPlus wiki.

The four participating programs – [Centre for Community Learning and Development \(CCL&D\)](#), [Labour Education Centre \(LEC\)](#), [PTP Adult Learning and Employment Programs - East](#) and [St. Christopher House Adult Literacy Program](#) – self-selected. It is remarkable just how fully these four programs represent the range of programs in the community-based sector. Each program has its own unique delivery model, and we had the opportunity to see a small slice of each program and to gain some insight into the overall model and approach. The range of models we observed included project-based delivery, labour literacy delivery, traditional adult literacy delivery, and a planned, integrated approach to digital technology delivery.

## What AlphaPlus set out to learn

We wanted to:

- see how a program uses, works with and integrates digital technology in adult literacy programming
- explore how programs are actually using digital technologies and e-learning (We define e-learning as teaching and learning with digital technologies)
- learn about the opportunities and challenges that programs face so that we are better informed and can more closely align our services and supports to the needs of adult literacy programs
- take a preliminary look at the use of digital technologies and e-learning in adult literacy programs in relation to the Use Digital Technology Competency of the Ontario Adult Literacy Curriculum Framework (OALCF)

## Digital technologies for teaching and learning – theories and research

In 2011, AlphaPlus conducted an extensive literature scan, *Finding Our Way*, to examine what we know and what we are learning about digital technologies in adult literacy teaching and learning. As we conducted that review, it became very clear that the sheer abundance of digital technologies and the fact that these technologies have now moved into every corner of our lives will transform how we think about, plan for and provide adult literacy learning opportunities. They will transform our very understandings of what literacy is.

We came to see that the use of digital technologies is no longer optional in learning environments.

Programs and practitioners are under considerable pressure to include, incorporate and integrate digital technologies in their programming and practices. This is underscored in the new *Ontario Adult Literacy Curriculum Framework (OALCF)* which includes Use Digital Technology as one of the six competencies.

Although there is pressure on programs and practitioners, there are also many opportunities. Practitioners have access to a very wide range of resources and materials for use in their practice. With increasing frequency, practitioners are authoring, creating, modifying, adapting and sharing materials and resources to meet the needs of students.

Students have opportunities to learn anywhere and anytime, to develop their facility with digital devices and technologies, to learn collaboratively, to engage in peer-to-peer teaching and learning, to create, to collaborate, and to share with instructors and with other students.

There is evidence that using digital technologies does lead to learning gains, and that students at all literacy learning levels can benefit from using technology.

<http://iincs.ed.gov/publications/pdf/NIFLOnlineLearningReport.pdf>

<http://etcjournal.files.wordpress.com/2010/07/means.pdf>

## Ontario Adult Literacy Curriculum Framework (OALCF)

With the introduction of the OALCF, programs in Ontario are now required to address all six OALCF competencies based on the expressed goals of students. In addition programs must address the integrated nature of the curriculum framework and the implications of that integration.

“Although the competencies are explored separately in the Curriculum Framework, they are intended to work together to inform programming...” (p. 11)

[http://www.tcu.gov.on.ca/eng/eopg/publications/OALCF\\_Curriculum\\_Framework\\_Oct\\_11.pdf](http://www.tcu.gov.on.ca/eng/eopg/publications/OALCF_Curriculum_Framework_Oct_11.pdf)

In our original request for host community-based literacy programs for our project, we said that we hoped our project “will be an important first step in planning the development of a curriculum module to support the OALCF Use Digital Technology Competency.”

Having observed a wide range of use and integration of digital technologies across all four host programs, AlphaPlus now has a much sounder sense of the types of learning activities that could support instructors working with students on the Use Digital Technology Competency. If we look at some of the learning activities in use in each of the programs through the lens of the OALCF, we can see that these activities fall under at least four of the required competencies.

Activity	Use Digital Technology	Find and Use Information	Communicate Ideas and Information	Understand and Use Numbers
Digital Story (CCL&D)	x	x	x	
Presentation (PTP and CCL&D)	x	x	x	
TTC (St. Chris)	x	x	x	
Wiki (LEC)	x	x	x	
Using a Computer (PTP)	x	x	x	x

# PROFILES



Labour Education Centre students participate in a computer session.

## Program profiles

► Centre for Community Learning and Development  
<http://www.tcclid.org>

Centre for Community Learning and Development (CCL&D) is located in the Regent Park neighbourhood of Toronto. CCL&D, formerly known as East End Literacy, has been in operation since 1979. The program began as a community-based literacy agency serving the east end of the city of Toronto. Over the years, the work of CCL&D has expanded. It now includes semestered adult literacy programs focused on academic upgrading, leadership training, community needs assessments, digital storytelling and organizational development. CCL&D works within multiple partnerships and with communities throughout the Greater Toronto Area (GTA).

At CCL&D we observed LBS classes at Levels 2-3 and 4-5<sup>2</sup> as well as the Immigrant Women's Integration Program (IWIP) digital storytelling class.

At CCL&D, digital technologies are an integral part of all programming. They have a dedicated and very well-equipped, state-of-the-art digital technology learning area and a set of standalone laptops for use by students. Guided and facilitated by instructors, students are expected to participate in the programming through the use of computers, to have an email address, to communicate by email with instructors, to write using computers, and to work collaboratively.

CCL&D has designed programming around the use of Microsoft Office Suite and Digital Storytelling<sup>3</sup> – major tools for learning both for LBS students and for IWIP participants.

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2 During our project, literacy programs in Ontario were moving from an outcome-based system (Level Descriptions Manual) to a task-based system (Ontario Adult Literacy Curriculum Framework). We use language and terms in this document that reflect what programs were using when our research was conducted.

3 Digital Storytelling: A Great Way to Engage and Inspire Learners. NWT Literacy Council (2010)  
<http://library.nald.ca/item/9749>

## Microsoft Office Suite

Students begin with simple word processing in Microsoft Word and move on to create simple worksheets in Excel and develop PowerPoint slides. For example, LBS Level 2-3 students work on writing a letter of complaint based on a supplied text. With the help of the instructor, they proofread the text, save the letter in Word and create a PDF document, which they then attach to an email to be sent to the instructor. The instructor is constantly available to help students as they work and consistently shows alternate ways to achieve the same result, i.e., Save, Save As, etc. As they work through these tasks students are also engaged in literacy learning. In the process students are engaged in practical, authentic and meaningful tasks that provide them with exposure and practice in creating, saving and emailing a document.

In Microsoft Excel students work with supplied spreadsheets to learn to format, use simple formulas, create a household budget and do simple calculations. As students get exposure to and practice using Excel, they also work on numeracy skills. These exercises, again, are meaningful authentic tasks, and students gain critical exposure to this specific type of document use.

Students working with Microsoft PowerPoint learn to insert images and format text, which they then draw on to create their digital stories. Students also gain skills and practice in communicating ideas and information through PowerPoint activities and group work.

## Digital Storytelling

Each student in both the LBS and the Immigrant Women's Integration Program (IWIP) is required to script, edit, develop and produce a digital story. Program staff is available to support and assist at every stage of the development of the digital story and are responsible for post-production, e.g., audio editing, fixing production sound, adding soundtrack elements and correcting colour.

The use of the Digital Storytelling tool provides several forms of learning – visual, auditory and literacy – as well as personal exploration, storytelling, technical skill



development and integration, and collaborative skills<sup>4</sup>. Ultimately, students will have a finished product as evidence of the integrated skills and knowledge they have acquired as well as a personal record of their own story. According to the Educational Uses of the Digital Storytelling site at the University of Houston, the development of digital stories offers students opportunities to:

- learn to use the internet to research rich, deep content while analyzing and synthesizing a wide range of content
- develop communication skills by learning to ask questions, express opinions, construct narratives and write for an audience
- increase their computer skills using software that combines a variety of multimedia including: text, still images, audio, video and web publishing<sup>5</sup>

In all of the learning activities that we observed at CCL&D, the instructor facilitates rather than instructs. The instructor generally begins by showing students a sample of what they will be required to do, giving students just enough information to get started and then allowing them to explore, and encouraging students to ask for help as they need it. There is a strong emphasis on visual and experiential learning. Students learn by doing and are actively encouraged to collaborate, learn with and from each other, and to turn to the instructor for support. Students become absorbed in the tasks and the amount of peer-to-peer learning is impressive, particularly at the higher learning levels as students support and assist each other, sharing what they know, asking each other questions and working cooperatively and collaboratively. The overlapping tools – Digital Storytelling and Microsoft Office Suite – provide students with a rich, technology-integrated teaching and learning environment in which digital technologies are tools for learning and doing rather than as ends in themselves.

Technology tools that we observed in constant use at CCL&D in the LBS and IWIP classes:

- Microsoft Office Suite
  - Word
  - Excel
  - PowerPoint
- Google Images
- Email
- Audacity (a free audio editor and recorder)
- Adobe Premiere

4 <http://adulthoodliteracyandtechnology.blogspot.ca/2011/03/digital-storytelling-tools-for.html>

5 Robin, B. (2011) The Educational Uses of Digital Storytelling website <http://digitalstorytelling.coe.uh.edu>



The [Labour Education Centre \(LEC\)](http://www.laboureducation.org) is located near the high-need neighbourhoods of Thorncliffe Park and Flemingdon Park in Toronto and has been in operation for 25 years. The centre offers Literacy and Basic Skills (LBS) and employment programming to union members and workers, both employed and unemployed. The LBS program is based on labour literacy principles:

- building on students' existing knowledge
- recognizing students' diverse learning styles
- providing learning activities and resources tailored to the expressed learning interests of students, including employment, training, community and current affairs

The LEC has a full-time, multi-level continuous intake class open to the community. About 15 students attend on most days, but attendance can range from 12 to 20. Students can access laptops to improve their computer skills.

The LEC also has part-time classes delivered in partnership with local Action Centres, where laid-off workers can access a range of services to help them to find employment or to access short-term training.

### LBS class

This study worked with the full-time class. Over the course of the study, the students moved from reluctance to use digital technologies to fully engaged excitement. Computers were upgraded and a series of learning activities were developed. During the study, all efforts were made to remove barriers and to support students to recognize the value of working with digital technologies and to see that they were indeed gaining skills and increasing their proficiency.

One issue that is difficult, if not impossible, to resolve is the variability in the skill and comfort level of students in relation to digital technologies. This diversity is complicated

by continuous intake, with new students not having the benefit of preceding lessons. Instructors have to be very creative in designing learning activities that will meet the needs of each student. In this class, the instructor and the AlphaPlus staff person worked together to design learning activities that would be meaningful to all of the students. They developed activities on goal setting using Microsoft Word. They also developed a wiki using PBworks to enable instructors to post information about past and upcoming classes, assignments and handouts for students who may have missed a class, and to share information about employment opportunities. Over time games, recipes, pictures, links and dictionaries were added to the wiki. The wiki proved very helpful to new students and to those who had missed a class. Students suggested new content and were eager to contribute and add resources and information to the wiki.

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Although some students were somewhat reluctant to use computers, I noted that many used Smart Phones, texted, and took some time at the end of class to check their Facebook accounts. To reach out to those students and to build a stronger class community, a class Facebook page was created and used to share links, pictures, and stories. It also provided reminders about assignments and deadlines.

Monika

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Using Microsoft Word, the instructor and the AlphaPlus staff person also developed a tracking sheet for students to record and track their developing digital skills. Each student received help to establish a working email account, which made it easier to connect with the instructor between classes. Learning activities and lessons on email vocabulary and the effective use of email were offered as part of the class work. Students were introduced to web tools such as Picasa and to web search techniques for a variety of topics, including resumé writing, job search, and personal interests.

As the classes continued, students were encouraged to develop additional digital technology skills. They set up their own email addresses and used them to submit assignments and communicate with the teacher. They used Google search to do

research for Black History Month and used Glogster to create interactive posters about their favourite heroes. They played online games to develop their vocabulary and used Picasa to explore pictures and maps. They collaborated on Google Docs to create a timeline of their lives. They also practiced their word processing skills by creating documents to develop their short- and long-term goals, prepare resumés, list their existing and new digital skills, and make a list of shortcuts to improve their typing and computer skills. While working on documents and spreadsheets, students also learned the difference between Save and Save As. To make sure they always had access to their files, they received and used USB sticks.

The key goal was to demonstrate to students why digital skills are necessary and beneficial in many parts of their lives and to engage them in using digital technologies.

## Caregivers class

LEC's Caregivers class is set up through a community partnership and provides training and support to live-in caregivers. To upgrade their skills, students attend 3-hour classes on Saturdays and focus on their reading, writing and computer skills.

During the study we had a chance to participate in three of their Saturday sessions. In all of them, students were encouraged to use computers and some brought their own laptops to the class.

The LEC instructor and the AlphaPlus staff person used the following tools and applications with students.

- PBworks
- Facebook
- Google Maps
- Google Search
- Google Docs, now Google Drive (Google Document to collaborate on content and Google Forms for quizzes)
- Email programs (Gmail, Yahoo, Sympatico, etc.)
- Glogster
- Picasa
- Prezi to show Prezume Games (Bookworm, Rice for Literacy, Guess the location on Picasa, etc.)
- Microsoft Word/Excel (Save vs. Save As, attachments, inserting images, templates, tables)

# PROFILES

During the first class we attended, the instructor used *Essential Skills for Internet Use* to explain internet browsers, do Google search activities, discuss caching and teach some of the other internet basics.

In the second class, she focused on spreadsheets and in the third class on using templates to create resumés. All activities were designed to help students develop skills they will need in real-life situations, for example, buying a car, calculating their pay and tax deductions or looking for a job. The technology was used as a tool to support the research, develop documents or create budgets.

The students were open to learning and using technology, often working together and helping each other. The teacher provided clear instructions and ensured that all questions were answered and students were comfortable with the content.

In both classes, the instructors were comfortable with technology but they pointed out that the study “helped them see the relevance of teaching digital technologies in their classrooms and feel more comfortable teaching and advancing those skills every day.”



Monika demonstrates how to use Google Docs in the LBS class.

## PTP Adult Learning and Employment Programs <http://www.ptp.ca>

PTP East Centre is one of two PTP programs in Toronto and is located in the central east end of the city with another centre located in the southwest end. PTP has been in operation for 20 years, offering a wide range of basic skills education and upgrading as well as job search skill development and related services to adults who are seeking employment or who wish to pursue training or further education. At PTP East Centre there are two Workplace Communication classes, two Workplace Math classes, and two Workplace Computer classes per week.

In the Workplace Math classes students work on basic math concepts and applications like bookkeeping (transactions, balance sheets, etc.). Students use software like Excel and QuickBooks Pro contextualized in activities using various company profiles. AlphaPlus staff attended the Workplace Computers class at PTP East. This is a continuous intake program where the majority of students have been assessed at various reading levels ranging from LBS 1 to LBS 5.

The students' levels of familiarity and comfort with the use of digital technologies varied from novice to very experienced. For example, on one occasion as the class worked through a short Moodle course, one student who had to leave the class early asked if he could continue to work on the course using a Moodle app on his iPod.

The Workplace Computers class is organized on a project-based instructional model, and technology is integral to instruction in the class. The class regularly uses technology tools such as email with attachments, wikis, presentation tools, the internet, blogging, YouTube and Creative Commons. Under the guidance of their instructor, students are involved in monthly technology maintenance tasks, such as emptying their computer cache and deleting temporary internet files.

The PTP East Centre has an up-to-date computer lab with 15 stations plus an instructor computer on a separate desk. Both small and large project-based group work is facilitated by the instructor and individual assignments are used to extend reading activities.

An example of an individual project-based assignment is watching a YouTube video and answering short questions about the video. A project-based team example is searching the internet to find videos about what kind of jobs can be done around the house and reporting back to the class. Students receive feedback via email and learn to manage attachments.

In one instance the instructor worked with students to prepare a PowerPoint presentation where students chose a topic from a list supplied by the instructor and then used the internet to research information related to their topic. Their assignment was to create a presentation of five slides to be posted on SlideShare or YouTube and to be presented to the class.

The instructor began the class by showing a YouTube video to introduce the use of PowerPoint, and reviewed the initial steps of creating a PowerPoint presentation with the group onscreen. Each student then received a step-by-step handout from the instructor and created their own presentations. Quick transitions between observing the instructor and executing the same task themselves helped to engage the students.

The instructor at PTP requested support in installing and setting up Moodle and was interested in a general discussion regarding the creation and alignment of learning activities and tasks with the OALCF. Throughout the course of the study the instructor and Matthias Sturm from AlphaPlus discussed how current learning activities related to the OALCF. In relation to Moodle, Matthias worked with the instructor to explore:

- installation of Moodle on a temporary server
- Moodle Course building (including defining user roles, login and sign-on options)
- site configurations and administration options
- adding Moodle modules and blocks
- integrating Hot Potatoes activities and adding audio-visual supports
- embedding websites
- networking options with Mahara e-portfolio

During their presentations, students were instructed to observe three fundamental presentation rules: face the audience, maintain eye contact, and project your voice. Students were encouraged to present in a professional and interactive manner, and the class audience was encouraged to ask questions of the presenter. The result was a Q & A style presentation that was very interactive in which students learned to consider the expectations of their audience more intentionally.

On another occasion, students watched a YouTube video of a speech delivered by the Dalai Lama about the role of women in today's society. Students were then asked to give feedback about the video in a group discussion format and to state their own position on the issue.

Topical subjects were often used in learning activities, an example being a focus on the Occupy Toronto Movement. In the Occupy Toronto Movement learning activity, the class viewed a YouTube video on the manifesto of the Occupy Wall Street Movement followed by a short class discussion. Students were asked to state their own position on the Occupy Movement with supporting reasons. The instructor followed this up by creating a class blog and recording students' positions. Students were then instructed to create their own blogs. The instructor demonstrated the step-by-step sign-up process using the WordPress blog tool. His instructions included explanations of the importance of using a real email address for set-up purposes and how authentication works online. Students chose their own WordPress blog name, completed the sign-up for their blog, chose a blog template, and wrote a few lines for their first post.

In the series of classes we observed at PTP East Centre, the instructor acted as facilitator, introducing an assignment, demonstrating the steps for completion, and then allowing students to work in pairs or small groups to complete the assignment. The instructor was constantly available to answer student questions, clarify learning and help resolve problems as they arose. Students were regularly called upon to make presentations to the whole class and to share their learning and knowledge.



## St. Christopher House Adult Literacy Program <http://www.stchrishouse.org>

The [St. Christopher House Adult Literacy Program](http://www.stchrishouse.org) is located within historic St. Christopher House, a multi-service social service agency in the west end (Ossington and Dundas) of Toronto. The Adult Literacy Program offers one-to-one and small group literacy learning. The program is part of a larger cluster of programs that includes a General Education Development (GED) preparation program and a computer access and tutoring program.

Adult literacy students coming into the program space are clearly comfortable in the program. Each student is known by name and is greeted as they come in. Coffee and snacks are available, a telephone is available for student use, the computers are available and access passwords are shared with students. The computers in the program allow students to store their files and the resources they use to learn, including CDs as well as multiple links to online learning sites. We observed that students who may be living and learning with multiple challenges are offered real opportunities to acquire and maintain literacy, numeracy and digital skills with the constant support of skilled practitioners, in a supportive and relaxed adult learning environment.

As with many community-based programs, the St. Christopher House Adult Literacy Program serves learners with a wide range of learning needs, and tailors programming to those needs. Technology is incorporated into programming based on the needs and learning levels of students.

This program makes a clear commitment to accessibility and inclusivity, evident by:

- the moveable computer table that can accommodate different sizes of wheelchairs
- the availability of an oversized keyboard to accommodate learners with low vision
- headphones that can be borrowed to support computer-based learning with audio
- a couple of computer stations that have wide desk space
- staff familiar with Zoomtext options
- copies of software available on all five computers to allow for flexibility

Much attention has been paid to ensure accessibility and learning support. However, even with all these supports in place, some students may require additional encouragement and access to different accommodations.

The program has 16 computers of its own and access at times to additional computers, which are available to the public as part of another community program (Bang the Drum).

Consistent connectivity to the internet is an issue for the program. As an alternative, a resource collection of CDs ensures uninterrupted access to computer-based learning opportunities for students who wish to work on a range of literacy and numeracy skills.

Staff sought AlphaPlus support and advice about the best use of technology resources for the wide range of learners who attend the Computer Drop-in and to determine how and where the OALCF will impact their program tutors.

The AlphaPlus staff person:

- conducted an inventory of all learning software in the program
- reviewed *Factory Mystery* in the context of the OALCF and mapped the content to the OALCF

*Factory Mystery* was selected because it:

- was developed in Canada with Canadian content
- offers 140 hours of learning activities at LBS Levels 2-3
- can be used by groups and by tutor and learner pairs
- includes a solid learning management system
- offers a practical solution to connectivity issues

A print copy of the mapped activities was developed and left at the St. Christopher House Adult Literacy Program as a sustainable resource to be used by staff and by tutors.

Many of the CDs have been uploaded to the computers for use by tutors and learners, and are easily accessed from the opening screen on each computer. The slice of the St. Chris Program that AlphaPlus staff was able to observe was an afternoon Computer Drop-in time, when students and tutor pairs could freely use the computers and request staff support in learning. Much of St. Chris programming takes place in structured group learning and paired tutoring, and the Computer Drop-in offers an unstructured independent learning opportunity.

AlphaPlus staff observed students during the Computer Drop-in time using CDs to expand spelling and vocabulary skills, accessing the internet to locate games to hone their skills, sharing Facebook information and set-up options, transcribing hand-written articles for the program newsletter, and learning to use mapping tools to plan housing searches and job interview meetings. Other students were fully engaged in paper-based learning with some online tool support for math skill gain, e.g., using an online calculator.

Most often students worked on their own skill areas, but there were times when students worked together to solve problems using the online [Math Journey](#) site where, for example, a student usually excluded from peer-supported efforts was able to fully participate and work collaboratively with the other students because the online activity included a range of learning levels. It was interesting to watch three students engage in the same online activity involving math, and each find their own way to do the math: one calculating in their head, one using formal math equations on paper, and one using pencil strokes and counting.

In another instance, a student and instructor worked with the AlphaPlus staff person to develop a short Moodle course on using the TTC.

For some students the Computer Drop-in time was their literacy program, not being in a formal group and not yet having a tutor to work with. For other students the Computer Drop-in time was used to complete work from their other group learning or tutoring.

## What we learned

All four community-based adult literacy programs that we observed design programming based on the needs of the learners they work with and align programming with adult learning principles. They provide opportunities and support through the use of technology tools and resources to learners interested in expanding their literacy learning.

Intentionally integrating or introducing digital technologies to adult literacy programming adds layers of complexity to learning and each program we observed addressed this additional complexity in its own way, according to its own values and as part of its work to support the learners in the program.

At AlphaPlus, we see the advantages of digital technology integration and use (our learning in this area is documented in the [Finding Our Way](#) literature scan) and we have spent a great deal of time and energy promoting digital technology use and integration in adult literacy programming. However, it is clear, and made even more so through the opportunity we had to see how our host programs work with digital technologies, that integration is not simply a decision – it is a process with many facets and phases.

A critical piece of our learning from direct involvement with our host programs is just how closely the use, incorporation and integration of digital technologies is aligned with the values and mission of each organization. It seems clear to us now that in each of the programs it is the organizational values and strategic priorities that dictate how digital technology is used, incorporated and integrated in programming.

It is not a question of doing it the right way or the wrong way, but rather of how the intentional introduction of digital technologies fits within the programming and how the use of these technologies supports programming in relation to the overall vision and mission of each adult literacy program.

The practical steps towards introducing and integrating digital technologies into the delivery of literacy programming flow from the vision and values of the program and support decision-making about acquisition of equipment, staff development and instructional planning. Although this may seem pretty obvious to practitioners and program coordinators in the adult literacy field, it is too important to overlook.

Each of the four community-based literacy programs brings its own unique perspective based on its own values and vision and, as we shall see below, applies it to the use, incorporation and integration of digital technologies.

## Centre for Community Learning and Development (CCL&D)

**At CCL&D, the program has adopted a very clear strategy to integrate digital technologies and digital media in all aspects of its programming.** The Mission Statement of CCL&D is strong and clear:

*Creating a strong culture of community engagement through capacity-building, progressive learning and innovative training.*

This mission is clearly supported in the CCL&D Strategic Goals which include a commitment to provide training services and learning opportunities that are relevant to today's technologies. CCL&D has further committed to integrate technology and media into its entire program with the goal of making digital media and technology accessible to more and more residents in the inner suburbs and priority neighbourhoods<sup>6</sup>.

Ultimately the key is the use of technologies as tools to enable and extend learning with students working on tasks which build skills, and to increase knowledge and capacity, rather than working on so-called computer skills as a separate activity.

<sup>6</sup> Private communication with the Executive Director of CCL&D, March 2012

In the LBS Program and the Immigrant Women’s Integration Program (IWIP), CCL&D uses two overlapping mediums to achieve their strategic goal. The Microsoft Office Suite, including Word, Excel, and PowerPoint, is used as a tool to support and extend literacy and numeracy learning, civic engagement and personal empowerment. Skills and knowledge acquired or enhanced using this medium are put to use when students in the IWIP and LBS Program are given the opportunity to work in the second medium – Digital Storytelling. When working with Digital Storytelling, students have multiple opportunities to develop a wider range of digital skills. In all of the learning activities at CCL&D the emphasis is on ensuring that students have access to a range of learning opportunities, making use of digital technologies to support independent, creative and collaborative learning connected to student goals, including academic upgrading, employment and community engagement.

Digital technologies are an integral part of programming – seen and worked with as a means to an end. Having a very strong strategy enables CCL&D to:

- plan for and implement a training program in which digital technologies are used to fully support program goals
- plan for and prioritize resource allocation to ensure that technology infrastructure is state-of-the-art
- support a robust professional development program in which program staff are empowered to develop their skills and knowledge in the area of digital media

## The Labour Education Centre (LEC)

**The LEC programming model is holistic;** that is to say **it encourages and supports learning for the whole person, and encourages critical analysis.** The principles of worker-centred learning and labour literacy are applied – instruction builds on what workers already know and addresses the needs of workers and students as whole persons.

These principles and values are reflected in the non-hierarchical nature of the computer class we observed. No attempt was made to force participation, but rather efforts were

# LESSONS

made to draw on what students had identified as their learning needs and priorities. Ultimately instructors are challenged to collaboratively develop learning activities using digital technologies that are meaningful to students. Every effort is made to accommodate a range of interests, learning needs, and levels of familiarity and proficiency in digital technologies. In this process, we saw that students became fully engaged once they were convinced of the usefulness and efficacy of digital technologies to support them in achieving their own goals.

The chart below outlines how worker-centered learning and the labour literacy approach both promote holistic environments and encourage students to reflect on what it is they are learning.

<b>Worker-Centred Learning</b>	<b>Labour Literacy Approach</b>
<ul style="list-style-type: none"><li>• builds on what workers already know</li><li>• addresses the needs of workers as whole persons</li><li>• enables workers to have more control over their lives and jobs</li><li>• involves workers in decision making</li><li>• reflects the diverse learning styles and needs of adult workers</li><li>• is developmental</li><li>• looks to integrate literacy with other aspects of workplace training</li><li>• assures confidentiality</li><li>• is open to all</li></ul>	<ul style="list-style-type: none"><li>• is participatory, inclusive and deeply democratic in both its aims and its methods</li><li>• acknowledges and builds on the experiences and skills of workers</li><li>• involves hearts as well as minds</li><li>• promotes solidarity and respect among workers</li><li>• enhances workers' capacities for critical reflection and action</li><li>• links education with action in the world in a project of social transformation</li></ul>
<a href="http://www.yorku.ca/julabour/volume1/jl_levine.pdf">http://www.yorku.ca/julabour/volume1/jl_levine.pdf</a>	<a href="http://www.nald.ca/library/learning/clc/seeds/seeds.pdf">http://www.nald.ca/library/learning/clc/seeds/seeds.pdf</a>

The computer classes supplemented class discussion and activities related to the concurrent public and Toronto City Council debate on subways, Light Rail Transit (LRT) and other transit issues. Students used the computer to sign online petitions, look up their city councillor and email their councillor a message (students were very excited and impressed when their councillor responded).

## Preparatory Training Programs (PTP)

**PTP has adopted a contextualized learning model<sup>7</sup> throughout the program.**

**In PTP's Workplace Computers class, the instructor focused on a project-based learning model** in which students work in pairs, individually and in groups on clearly defined projects to produce a product. Along the way they also have opportunities to work on a range of skills. Digital technologies are an integral part of programming, as tools and as supports for the development of digital technology skills that will enable students to be successful in pursuing further education and training and employment.

A contextualized learning approach is based on the idea that effective instructional strategies and materials draw on students' experiences and immediate needs and requirements. The focus is on the application rather than the possession of basic skills and knowledge.

<http://www.ptp.ca/wp-content/uploads/2008/03/teamworkreportfinal.pdf>

Project-based learning has been described as follows:

- The learners gather information from a variety of sources and synthesize, analyze, and derive knowledge from it
- The learning is inherently valuable because it is connected to something real and involves adult skills such as collaboration and reflection
- At the end, the learners demonstrate their newly acquired knowledge and are judged by how much they have learned and how well they communicate it

Throughout this process, the teacher's role is to guide and advise rather than to direct and manage student work<sup>8</sup>.

7 Imel, S. (1998) Using Adult Learning Principles in Adult Basic and Literacy Education. [ERIC Clearing House on Adult, Career and Vocational Education.] Ohio State University, College of Education. Center on Education and Training for Employment

8 [http://projects.coe.uga.edu/epltt/index.php?title=Adult\\_Learning#Project\\_Based\\_Learning](http://projects.coe.uga.edu/epltt/index.php?title=Adult_Learning#Project_Based_Learning)



At PTP we observed several instances of project-based learning using digital technologies. For example, students were assigned topics to research and prepared a short presentation in PowerPoint to be posted on YouTube or SlideShare.

In this example, four integrated resources were used for teaching the PowerPoint concept: a YouTube video (which could be accessed independently afterwards as well); a PowerPoint demonstration by the instructor; paper-based, step-by-step instructions; and active instructor support as needed. In another case, students were assigned the task of using the internet to find jobs to do around the house and then reported back to the full class. Finally, students were asked to research the Occupy Toronto Movement, to take a position and to prepare a blog post outlining their position. In each of these cases students were working on gathering, synthesizing, and analyzing information and sharing their knowledge of what they have learned.

## St. Christopher House (St. Chris)

**At St. Christopher House the model is that of a traditional, community-based, literacy program.** Learning opportunities are made available to students in a safe, friendly, non-judgmental environment. Instructors act as guides and mentors for students in one-to-one and small group settings. This type of programming has been described by one researcher as follows:

*Literacy training is understood by community-based literacy programs (along with related services in job training, life skills, computer skills, addiction treatment, health care, etc.) as a crucial means of empowering people — of giving them (or at least attempting to give them) the essential set of tools that will allow them to participate more effectively in their community, in the economy, in elections, in the wider education system, even in their families.<sup>9</sup>*

<sup>9</sup> McNaughton, C. Literacy in the community learning context, p.1  
<http://www.nald.ca/library/research/craig/craig.pdf>

Project-based learning (PBL) is an approach to instruction that focuses on problem-solving and/or product development. Learners generally work collaboratively in groups to solve a problem, accomplish a task, or both. PBL helps students see how the skills and content they learn in the classroom can apply to real life.

<http://www.lacnyc.org/resources/IT/pbl.htm>

At St. Christopher House, we observed the Computer Drop-in, which is a weekly session where students come into the program to work relatively independently but where staff and tutors are available for help and support on a one-to-one basis. Students work on a variety of tasks: numeracy, spelling, vocabulary development, language experience, uploading photographs, and checking their own social media sites.

For example, a learner who is working at a basic level of literacy and has a personal interest in photography but no home computer can bring a digital camera to the program to upload photographs. This way, the learner becomes comfortable with and adept in this area of computer use and this contributes to his ability to use the computer to type stories developed with a practitioner through language experience. His stories are published in the program newsletter. Based on the learner's high level of interest in photography, program staff have worked on extending the learner's knowledge of and use of online storage sites such as Flickr. Staff have also explored with the learner whether and how to use a USB to store photographs.

Another example is a request by a student that the literacy program teach students how to get around on the subway. The student brought paper-based TTC maps to be used as a resource in the program. In response, staff and the AlphaPlus staff person searched for TTC-based learning activities online. Not finding any, they worked on developing a short Moodle course on using the TTC that can be used by students in the program. Following this request further, exploration online led to the development of a Delicious social bookmarking stack that includes links to information on the TTC website.

Digital technologies are incorporated into programming as evidenced by open internet access and access to CD software for students who come to the Drop-in to work on specific tasks. While they wish to work independently, they know they can also look to staff and tutors for support and assistance. This is a prime example of meeting students where they are and putting available resources at their disposal. A telephone is available for student use, computers are readily available, and access passwords are shared with students. This is just one small piece of the overall programming but it demonstrates that even with quite limited resources a program can use digital technologies to create a learning environment in which students have opportunities to work alone, together, and with support to pursue their learning.

## Key points

What is remarkable in all four host programs is the level of skill and care that practitioners bring to their work. It is inspiring to witness the way in which practitioners can monitor multiple students, all at different learning levels and levels of proficiency, keeping an eye on each one, but without being obvious about it, ready to help one-to-one on demand. This demonstrates intentional preparation, flexibility, trust that the technology will work, and confidence in practitioner ability to respond appropriately whether the question is about technology, literacy or content.

What our observations show us is evidence of a range of technology integration in play, **not a sequential process from non-integration to full integration.**

What our observations show us is evidence of a range of technology integration in play, not a sequential process from non-integration to full integration. We noted as well that the realities of day-to-day programming do not necessarily lend themselves to easy integration or to easy and consistent use of digital technologies.

Simply having digital technology devices is not enough. Technology infrastructure development and maintenance has to be planned for and adequately funded. Programs contend with equipment that is often out-of-date and often lack consistent available-as-needed technology support. Practitioners may have to try to maintain equipment themselves and troubleshoot technical problems while trying to deliver instruction. And all of this must be done with very limited resources, both in terms of money and time, with insufficient time for preparation, reflection or professional development.

Given this, it is not realistic or particularly effective to ask programs to simply integrate digital technologies, essentially to add them to existing programming and hope for a result. Adequate funding, careful thought and planning are needed, and programming priorities and organizational strategies have to be identified and implemented. Although adult literacy practitioners are knowledgeable in literacy instruction, they may not have a lot of experience in the use of digital technologies, particularly as part of the adult literacy teaching and learning process. Professional development is essential to provide practitioners with access to information, promising practices and opportunities to practice skills and incorporate learning into their practice.

# KEY POINTS

We hope that programs and practitioners recognize themselves and their practice in this account of four community-based programs and that, together, we will find a way to share what we know, what we are learning, and what we need to learn about using digital technologies to support and extend teaching and learning in adult literacy.

## Key Points

- All of the programs are using digital technologies
- There is no one-size-fits-all model of digital technology integration
- Maintenance of technology infrastructure is an issue
- Sufficient financial resources, to cover basic costs of developing and maintaining a robust technology infrastructure, is crucial to success
- Sufficient financial resources to enable programs to provide practitioners with time to explore and develop their own digital technology skills, and to incorporate and integrate digital technologies in instruction are crucial to overall success. Release time for professional development and the resources to cover release time to learn are critical issues
- Student expectations and levels of proficiency in using digital technology are varied. Programs and practitioners have to work very hard to address a range of student learning needs as well as physical and other accommodation needs
- Organizational culture is important – a culture that fosters and enables professional learning and that values and promotes the use of digital technologies for teaching and learning is key to effectively integrating digital technology with adult literacy practice
- Strategic planning and prioritization are key drivers for successful use and integration of digital technologies
- Even students at the most basic levels of literacy can learn using digital technologies

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Transcript of our OTAN Webinar

[http://www.otan.us/DistanceLearning/forum/doc/digitaltech-adultlitref\\_script.pdf](http://www.otan.us/DistanceLearning/forum/doc/digitaltech-adultlitref_script.pdf)

Digital Literacy from NWT

[http://www.nwt.literacy.ca/digital\\_literacy.htm](http://www.nwt.literacy.ca/digital_literacy.htm)

## Appendix 1 – Invitation



### Learning Together Using Technology – Case Study

[AlphaPlus](#) is planning a short, collaborative project to support LBS delivery agencies to use technology and to learn about and to document just how digital technologies and e-learning are being used in adult literacy programs. We will be working with OSE to document our learning in a Case Study.

We are looking for four programs in the MTML Regional Network who would be willing to work with us.

#### *Here's how it would work...*

An AlphaPlus staff person will be on-site at your program for a maximum of 7 hours per week for approximately **16 weeks between October 2011 and February 2012**. Based on the needs of your program, and in collaboration and negotiation with program staff, we will work with you to identify online learning resources and activities and practical tools and strategies to support instruction as well as learning and professional development in the use of technology.

For example, together we could review the OALCF Use Digital Technology Competency to learn about milestone tasks and assessment strategies in relation to this competency. Together we could review e-learning opportunities or look at how social media could be used to support communication in your program.

#### *For Programs...*


For participating programs this is an opportunity to have on-site support from experienced AlphaPlus staff who have a lot of experience using learning technologies. AlphaPlus staff will work with your program to identify or design tools and strategies to support your programming, e.g., PD Action Plans, resource supports, e-portfolios, and technology self-assessment.

#### *For AlphaPlus...*

We see this as a valuable opportunity for AlphaPlus staff to work directly with adult literacy practitioners to learn how programs are actually using digital technologies and e-learning. This knowledge will enable us to enhance our support to the adult literacy field and will be an important first step in planning the development of a curriculum module to support the OALCF Use Digital Technology Competency.

To learn more, please contact us at AlphaPlus at: [info@alphaplus.ca](mailto:info@alphaplus.ca)

## Appendix 2 – Letter of agreement



Learning Together Using Technology – Case Study

**Letter of Agreement**  
AlphaPlus and ANY Program

**Parties**

- AlphaPlus
- ANY Program

**Activities**

- An AlphaPlus staff person will be available to be on-site at ANY Program for a maximum of 7 hours per week between October 2011 and February 2012
- Specific day(s) and number of hours will be negotiated between Program staff and the AlphaPlus staff person
- In collaboration with Program staff we will review and document current digital technology infrastructure in the program
- In collaboration with Program staff we will review and document the current level of digital technology use in the program
- The AlphaPlus staff person will conduct and document semi-structured interviews on digital technology use with participating practitioners

**Timelines**

Approximately **16 weeks between October 2011 and February 2012.**  
Dates and times will be negotiated between AlphaPlus and ANY Program

1



## AlphaPlus will

- Provide a staff person to be on-site at ANY Program for a maximum of 7 hours per week between October 2011 and February 2012
- Communicate directly with the Program Manager or Coordinator in all matters related to the Case Study
- Communicate with students only with the express permission of the Program Instructor
- Maintain strict confidentiality with regard to programming, student identification, observations, discussions and interviews with Program staff
- Provide ANY Program with a draft Case Study report in February 2012 for review and feedback
- Publish the final Case Study Report on the AlphaPlus website and make electronic copies available to ANY Program
- The AlphaPlus staff person on-site will comply with the office routines of ANY Program and follow any reasonable instructions that may be given
- It is understood that the AlphaPlus staff person is not an employee of ANY Program and therefore does not expect any compensation from ANY Program in connection with her/his activities at the agency
- It is understood that AlphaPlus will hold ANY Program and its employees blameless for any physical injury the AlphaPlus staff person experience during the period s/he is on-site at ANY Program

## Contacts

- AlphaPlus: Maria Moriarty  
[mmoriarty@alphaplus.ca](mailto:mmoriarty@alphaplus.ca)  
416-322-1012 ext. 106
- ANY Program:

## Signatures

\_\_\_\_\_ ANY Program

\_\_\_\_\_ AlphaPlus

... it is not realistic or particularly effective to ask programs to simply integrate digital technologies, essentially to add them to existing programming and hope for a result. Adequate funding, careful thought and planning are needed, and programming priorities and organizational strategies have to be identified and implemented.



“

Whenever I will do something on computer, I will remember you.  
Because you led me by the hand to using a computer.

LBS student

”