ADULT LITERACY AND TECHNOLOGY

REACHING THE BASICS AND BEYOND:
COMPUTER SOFTWARE RESOURCE FOR ADULT LITERACY

Technology challenges us to devise new learning methods and outcomes that reach beyond the building of basic reading, writing, and math skills. Involving our students in a Software Evaluation Project allowed us to combine basic skill building with available and emerging technology. This use of technology allows the development of analytical skills, practice in researching the Internet, and evaluating resources. Learners are evaluating the very learning tools that they are using. Including the learners in this project provided an innovative and unique learning environment. Not only did this project teach the basic skills but it also instilled in the learners a sense of pride and accomplishment as it elevated them to the level of teacher and consultant. It also offered the learners an opportunity to make a valuable contribution to the often under funded and resource poor literacy community.

This project challenged us every step of the way, but we were able to meet each challenge, each obstacle head on. The obstacles we encountered were almost always of a technical nature…the learners were never an obstacle…they were our source of inspiration.

Our use of technology began largely through experimentation while attempting to meet the needs of our learners. We believed that our learners needed instruction not only in literacy and numeracy skills but

also computer skills if they were to have a chance of finding **meaningful** employment in the workplace.

In 1995 our program purchased its first computer. The students eagerly awaited their fifteen minutes of computer time. They often lined up behind the person on the computer anxiously waiting their turn. We were surprised by their enthusiasm for the computer, and also by the differences that were noted in their learning. We noticed that their attention span was greater when they used the computer. Even students with attention deficits could sit for fifteen minutes or longer and be completely engaged in what they were doing. Students who had difficulty composing sentences on paper found it easier to compose sentences on the computer. Even though many of the shareware programs were rather childish most students enjoyed the opportunity to practice their math, spelling or reading in a more entertaining fashion.

We knew we needed more computers but had no funds. Therefore, we decided to go to the community with a request for "nearly new" computers. Within weeks we were inundated with computers and computer parts.

We learned from this experience that if you are going to solicit for used computers you must specify the minimum standard that you will accept. Today, it is best to state that you **not accept** anything less than a 486. Volunteers with technical experience helped us sort through the mass of hardware to identify what was salvageable. The end result was four 486 computers complete with software, and a storeroom full of spare parts.

We now had a new problem to tackle. We needed software, but again we had no funds. We knew from our experience with the Internet that it

had an abundance of free educational resources, including software. We started our search of the Net, and soon discovered that there was too much to choose from; math programs that covered everything from basic numeracy to algebra, there was even spelling, typing, astrology, history, languages, or grammar. We began downloading, and installing shareware programs only to find that many were not suitable for adult learners, or for some mysterious reason they refused to run on our 486 computers. It took hours and hours to find one or two programs that would run successfully. But it was worth the battle. The students were thrilled with their new learning tools.

In our conversations with other literacy providers we found that they were fighting the same losing battle with time and resources. Teachers and tutors were constantly scrambling to find materials that would work with adults. Most practitioners knew about the wealth of resources, and information on the Internet but they did not have either the time, the resources, or the computer experience required to access it.

It was time to take some action. This marked the birth of our Computer Software Evaluation Project. 1996 we received funding from the National Literacy Secretariat to do the work of searching for, evaluating, and cataloguing a list of educational software found on the Internet and to share the results with anyone who needed it. This project would assist literacy providers in accessing educational software, in the form of freeware and shareware from the Internet. It would also include an evaluation of the software by adult learners for its suitability in the adult literacy classroom.

We quickly learned that it was not as simple as surfing the Net for shareware, downloading it, installing it on the computer and enjoying your latest find! More often than not we would surf, download, and install the shareware and Voila! …Nothing happened! The obvious question was " Why not?" Many hours of investigation were spent answering that question, over and over again. The answers were not always the same. Sometimes it was because the program was written for a computer with a sound card…which we did not have. Or the program needed a certain type of file installed on the hard drive, which we also didn't have. At times it was because there was not enough memory to run the program, and other times the programs required higher speed processors to run correctly. Fortunately our computer researcher had encountered these problems before and knew what to look for and how to fix them.

We felt that the people who would be reading our evaluation would probably not have extensive computer experience. Therefore, it was decided not to include any software that required additional files before it could run or, was difficult to download and install.

The next major hurdle we ran into was with the restrictions associated with many shareware and freeware programs. Shareware is software that is made available to the public for a free trial. But, Shareware is not free. Publishers ask that if you like a product, that you send the author a required registration fee. In the past, collection of the fee was based largely on the honor system, whereas now the program will no longer run until you have registered it.

Freeware is just what it sounds like… software that a publisher has made available to the public for free. There are many free programs that

are comparable to pay programs. Pegasus is an example of an excellent e-mail program…and it's free. Older versions of Internet Explorer and Netscape are two other examples of well-known software that are available for free.

We have encountered some programs that are available at no cost to teachers and educational settings. For example, Algebra 1-1, and Math Brain Builder are great math programs for students working at a variety of grade levels, It covers various concepts and is available free of charge to teachers.

Freeware often comes with several conditions though. For example, some come with the condition that you send back an email to the provider. This lets the developer know that you are using the software and they can enlist you for future surveys.

As shareware is intended to be used as a "trial" version of a software program, many publishers have built in safeguards to ensure that you do not use the program for an indefinite period of time. The program is written to stop functioning after a specific number of uses, or after a given number of days. Unfortunately, not all publishers will state that their program has such a feature. This has caused us an enormous amount of grief. In order for a shareware program to be effectively evaluated the students need to spend at least two weeks using it. The first week is spent becoming familiar with how the program operates. The second week students use each of its features. Several learners may have evaluated one shareware program over a two-week period. This use may have exceeded what the publisher had intended as a trial, therefore the program stops functioning. We installed several shareware programs on

the computer for evaluation only to have them lock up after only a few weeks.

Because the Internet is evolving and changing everyday, many of the links to the download sites also change. Often a web page changes and links are not updated, or the software manufacturer decides to terminate the trial. This makes the job of keeping the links on our download page current and active, a big challenge.

Another hurdle that we had to overcome was the development our own Web page. Our project goal was to find shareware, have the students evaluate it, and then post the evaluation results on our Web site for literacy providers across the country. But first we had to create our Web page.

The size of our Web page proved to be another problem. We were larger than the two megs allowed by our Internet Service Provider. Going to a larger size meant a substantial increase in the monthly fee. We felt that this would present a problem when the project came to an end. That was when Charles Ramsey, Executive Director of the National Adult Literacy Database (NALD) came to our rescue. Despite its size, Charles offered to host our Web site on the NALD server. Soon after, another problem arose. Our Web page was created in a different format than what the NALD server would hold which meant our Page had to be re-written or re-formatted.

When we initially proposed the project we felt that the best way to distribute the results of the evaluation would be to put it on our Web site. Technology was moving fast and we had hoped that more programs

would have access to the Internet by the time the project was completed or shortly after. Unfortunately this has not been the case. We are still frustrated by the snails pace that technology is taking in the literacy field. More programs now have computers, but because of limited funding few programs have access to the Internet.

Technology is advancing rapidly, and keeping pace with it is a constant challenge. We are continuing to evaluate software from the Internet, but have made some changes over the year. This year we were fortunate enough to have acquired ten (10) new Pentium computers, with modems and CD-ROMs. This has given us new software to evaluate. The new computers offer us the opportunity to evaluate software designed for use on Windows 95 and 98. Our experience with this software, so far, has been very positive. Installation is easier with the new operating system (Win98), and the graphic and sound capabilities provide the student evaluators with software that is both educationally sound and enjoyable to use. Using the latest technology brings credibility to our programs, as employers recognize that our students are using tools that are relevant to the workplace. The challenges associated with this new software are: choosing from the multitude of programs available, and working within the given parameters of the trial and the increasing size of program files.

Having too many programs to choose from could be a disadvantage. It is often a guessing game when it comes to making a good choice. Many times there are more than five pages of math programs on one subject, in one download site.

Working within the given parameters of the trial means that you must complete the evaluation within the allowable time period. In addition, you must often make an assessment of the program based on a limited number of levels, or questions in each area. Trial versions of share ware often provide only, portions of the original program. The exact details of the trial are usually not revealed until you have the program installed. It is difficult to evaluate an entire program based on one or two questions per level, or with access only to the beginner material.

Although the additional graphic and sound capabilities are attractive to our evaluators, they pose a bit of a problem for both distribution to other training centres, and for loading onto individual computers. The number and size of the files required to run these programs, often exceed the space available on the average diskette, even in a zipped format. Although Samaritan House Training Centre has a zip drive, most other programs that we service do not have this luxury. That means, if they are going to use the program, they must not only download it themselves, but it must be downloaded onto the computer that will eventually run the program. Although, the files could be moved a few at a time, most educators we service do not have the experience required to do so.

In summary, we have all learned a great deal from this project. It has challenged us at every turn. But challenges are meant to make us stronger! And so they have. Both staff and students have benefited greatly from this project, in their knowledge of technology and also in their knowledge of themselves. The students are more confident and see themselves as having made a valuable contribution to the literacy field.

We hope that our work with this project will benefit literacy providers everywhere by providing easier access to useful and affordable adult literacy resources.

Just as technology is evolving…we to will continue to learn and evolve.

Sylvia Provenski
Education Program Coordinator
Samaritan House Training Centre

This project was made possible by a grant from the National Literacy Secretariat.