

Community Computer Literacy

Lunchroom Learning
The Link at the Library
Computer Camps

Three Different Approaches to Increasing
Computer Literacy in the Community

Community Computer Literacy

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For some students, the use of computers
may be tremendously
motivating, enabling and empowering.¹

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Community Computer Literacy

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Please note: There may be confusion for some concerning the verb tense mix in this report. Some aspects of this project are finished while others are entrenched in the community and still very much in action.

Community Computer Literacy

The Partnerships

The project was made possible through active partnerships. These partners took responsibility and made a real difference in the lives of people who were facing barriers that prevented them from attaining functional computer literacy. Our active partners are:

Northwood Inc.

Supported the idea from the start and provided the new computers to go in the lunchrooms.

The International Woodworkers of America

Encouraged workers to participate in the program and provided funds for software.

Employee Family Assistance Program-NW Inc. Houston Operations Committee

Coordinate the project in the mill. Work with counsellors to have literacy recognized as an identifiable, resolvable worker need.

The Houston Public Library

Willingly provides space, time, energy and expertise to the project.

Northwest Community College

Generously offers use of computer labs to computer camps.

Morice Community Skill Centre

Provides the next step for the mill employees who choose to upgrade literacy skills.

Ministry of Advanced Education, Training and Technology

Embraced the vision and maintains support and funding.

The National Literacy Secretariat

Supported our search for partnerships and provided funding.

Houston Link to Learning

Coordinates the project and the partnerships.

Human Resources Development - Summer Career Placement Program

Provides funding to hire skilled and enthusiastic student workers.

Project Vision

Projects grow from a personal vision. This project is a combination of two visions. Vision number one, *Lunchroom Learning* and *The Link at the Library*, belongs to Dave Manahan. Vision number two, *Computer Camps*, belongs to Kathy Anderson. It was the vision, the passion and the personal volunteer commitment of two people that inspired the Community Computer Literacy Project.

Sincere thanks to Kathy and Dave.

Acknowledgements

As with any partnership arrangement, a great number of people were responsible for this project being successful. I thank all of them for their involvement and dedication to seeing this project work.

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A vision without dollars, stays a vision. I thank our funding agencies, the Ministry of Advanced Education, Training and Technology and the National Literacy Secretariat, for their empowering grant, without which the vision may not have blossomed.

Thanks to all the learners who ventured into the great unknown and often frightening world of computers. Some of us will merely survive in this new technology and some will flourish. Either way, we will face computers on a daily basis. Our jobs and our futures may depend on how we embrace the computer world. Good luck and good learning to all of us with the exciting, new literacy.

Finally, thanks again to Dave Manahan for his work, on this report and the dedication he has maintained throughout this project.

Dee McRae

Community Computer Literacy

Three Different Approaches to Increasing Computer Literacy in the Community

Executive Summary

Throughout the community of Houston, the need for increased computer skills is apparent. Daily activities are being transformed into technological interactions. Assistance by a real person is often only by request. An individual intimidated by technology may not access the job bank, question an incorrect item on a bill, or get the services they require. When technology is introduced in the workplace, workers may not be able to keep up with job expectations. Low computer literacy skills can be costly to the individual and to the company.

For this project, we decided the most effective way for individuals to increase their skill and comfort level was to have fun with computers. We provided computers for open-ended learning and play, with back-up support and instruction. Instruction was low-key and relaxed. All instruction was free. We constantly worked to de-mystify the computer.

We created three venues for the project: the *Lunchroom Learning* stations at Northwood Inc., the *Link at the Library* stations at Gould Memorial Public Library, and the *Computer Camps* at The Learning Centre. While each approach was independent, integration of the three was continuous in the way the community used the available services. Each approach supported and increased the effectiveness of the others.

Thanks to this project, many people living in Houston now find themselves climbing or leaping the technological wall that, three years ago, they were stumbling toward.

Introduction

Houston is a community of about 4,000 people located halfway between Prince George and Prince Rupert. The forest industry is the major employer, with two sawmills in town. Mining is a secondary employer. One mine closed in 1992 and a new one started up in 1997.

Northwest Community College has been active in the community since 1975. In 1995, a partnership consisting of Northwest Community College, Houston Link to Learning (formerly Project Literacy Houston), School District #54 Storefront School, and the Morice Community Skills Centre was formed. All four education providers are housed on one site: The Learning Centre. The goal of the centre is to meet the needs of adult learners, from basic literacy level to special interest. Adult upgrading is a major focus. Each of the three partners, except Houston Link to Learning, has a computer lab with different software and focus.

Throughout the community, technology continues to replace face-to-face interactions. Bank machines were introduced. The employment office was closed and replaced with two job bank terminals. At the same time the community was undergoing technological advancement, the older sawmill in Houston, Northwood Inc., was increasing automation levels. Computers could not be avoided; they appeared in the workplace, at local businesses, at social service agencies, and in educational institutions.

With concerns for the individuals with lower literacy skills, Houston Link to Learning discussed how we could assist the people in our community with the shift into the computer age. We soon found we had many more questions than answers.

- What does the increase in technology mean to our community?
- How does the adult student respond to the computerization of the classroom?
- How does the mill worker respond when he finds a terminal at his workstation?
- What if the student or the worker is already dealing with low basic literacy skills?
- What are the different ways that industry and educators have dealt with this to date?
- What approaches to computer education work best for people with a fear of computers?

These questions helped to create the premise for the project to assist the people of Houston with the new literacy.

Community Computer Literacy

Components of the Project

By the spring of 1995 the project committee of Houston Link to Learning had determined the need for three specific venues and tasks for the project. The lunchroom would provide fun access for workers, the library would provide free access for the general public, the camps would provide fun, free instruction to the community. Although it would take almost a year before the lunchroom component was underway, the Link at the Library and the Computer Camps began that summer. Descriptions of each of the components follow.

Lunchroom Learning

In February 1996, we officially launched the Lunchroom Learning Project with two multimedia computers available in two lunchroom locations at the Northwood sawmill.

Lunchroom Learning proved to be the most complex part of the project and took additional time to implement. A major reason for this was the negotiations for an upgrading program between the sawmill and The Learning Centre. As often happens in small towns, Dave Manahan sat on both the upgrading and the lunchroom committees. He saw how the two programs complimented each other and suggested a combined launch of the programs.

The Link at the Library - Public Access Computers

In the summer of 1995, Houston Link to Learning obtained two multimedia computers that were placed in the Houston Public Library for public access purposes. (Library membership in Houston is free.) These stations are referred to as the Link at the Library in this document.

Computer Camps

Also in the summer of 1995, we were successful in funding a series of free computer camps for children and adults. We are now planning for our fifth camp season.

We continue to offer the free Super Basics Computer course to adults in the community during the fall and winter semesters.

Related Programs

The Basic Skills Upgrading Program

In February 1996 a completely separate program was launched. The Basic Skills Upgrading Program at the Morice Community Skills Centre Lab uses the Star 2010 Learning System, a computer based learning system. The mills fund lab time for employee upgrading. The upgrading program and the lunchroom project were launched together in the Northwood mill and connected in many other ways with the other components of the community computer literacy project.

Integration of the Project

While at first glance all these components seem separate and unrelated, we have found that learners combine the services to meet their needs. Our main objective throughout this project was to increase the computer literacy of millworkers and community members. In meeting this objective we see a high level of integration in the project. Some examples follow:

- the worker who plays with the computer in the lunchroom and then decides to enroll in the upgrading program
- the worker who comes with his wife to the Super Basics Computer course to learn more than what he can pick up in the lunchroom
- the senior couple who come to a computer course and then access the computers at the public library
- the worker who plays with the lunchroom computer, brings his children to the library so they can teach him more and then purchases a computer for the home, all the while continuing to use the lunchroom computer
- the regular user from the library who signs up for every summer course offered as a way to improve job skills
- the young mother who comes to the basic course in the fall, gets excited about learning and enrolls as a full-time student
- the beginner who fearfully attends the super basic class, gets hooked, and returns for a six month computer systems course
- the workers who play with the computers in the lunchroom, attend the upgrading program, and continue to use the lunchroom computers to access reference material to do “homework”.

It is apparent from these examples that the three delivery methods connect in a web-like fashion, with no specific starting point and no specific order of progress. There are some learners who attend only one facet of the project, and a high number of learners who access two or more components.

The public access computers are an important aspect of the project. Many adults who enroll in the computer camps do not own computers. This in itself is a major barrier to increasing one’s computer literacy. It is essential that there is a place for these students to practice their skills and produce documents.

Lunchroom Learning

Introduction

By: Dave Manahan

In 1985, the Northwood mill in Houston underwent a major technological change. Most of the workers were happy when it started. We all got the summer off while major changes were being made in our mill. We were wondering how these changes could reduce the workforce by 10% to 12% and, at the same time, increase production. All too soon, the answers were right in front of us causing more problems than we could have imagined. Our Safety and Employee Family Assistance Program committees began to discuss if the increase in health problems at work were related to the stress caused by the technological changes.

A reduction of the workforce because of technological change most often means a computer has been put into a work process. Here is an example of one specific job that really highlights these changes and the effects it had on an employee when computers were introduced into the workplace. At one time, there was a crane operator well known for his skill. Through technological change, the crane was eliminated, a computer controlled J-Bar system was put in, and he was faced with taking a job as a J-Bar spotter. This employee's job tasks now involved using computers on a daily basis. Instead of operating an important large machine that was critical to production and demanded a high skill level, he was now being told to push buttons on a control panel in an entry-level capacity. In this case, the employee could not deal with the changes and chose to retire early.

As if the technological changes were not hard enough to deal with, the Council of Forest Industry conducted a study of ten sawmills, one of which was Northwood Houston, and concluded that 65% of mill workers were at a grade 3 reading level. How would they adjust to these technological changes? At the time, this question was unanswerable and the industry realized that they were in trouble. The gap between employee job skills and job task requirements was increasing at a significant rate.

An example of this inability to do the job really came to light when the mill introduced a computerized tagging system at the wrapping station. The process to produce a lumber identification tag was simple: the employee must read a four digit number off a chart, key it into the computer, hit enter, and the tag is printed. The worker's fear of this new technology resulted in keying errors that led to a lot of loads with the wrong tags on them and the computer freezing up. Sometimes mill production would come to a stop. Everyday there were discrepancies in the inventories. When the workers called a technician, the workers were unable to provide information that would lead to a resolution. In many cases, a technician made a long trek to offer a five-second keying solution. Frustration levels in the workers, the technicians, and the supervisors were increasing. Production reports from the tagging system revealed that the increase in frustration levels was further affecting the abilities of many employees to perform their jobs. Somehow, the new problems that came with the technological changes in the workplace had to be

solved. A lot of time and money had been spent on introducing computers into the workplace, however little time and money has been spent on taking the fear of technology out of the employees.

Our industry has recognized education as a tool that impacts the abilities of employees to function at acceptable levels in the workplace. With the introduction of computers into the workplace, the fear factor had to be addressed. As a member of the project committee, I began to research possible solutions by touring one workplace education center, one sawmill that had an onsite upgrading program and one sawmill that had an off-site upgrading program. I gathered a lot of information at these places which was very useful, but I still did not answer the question, "How can we help the employees get over the fear of the computers?" The answer to this question came while I was watching a group of children having fun and learning at a computer station in a fast-food restaurant. My vision of computer stations in the sawmill lunchrooms was taking shape.

This vision was of two computer stations in the mill, one in the sawmill lunchroom and one in the planer lunchroom. Employees would participate on a voluntary basis and play with whatever programs they wished. Perhaps by playing with a variety of programs, the employees would have fun, learn and get over their fear of computers, the same way the children did.

Target group

Mill workers are the target group. We are interested in the older, career employee who quit school to go to work, as well as those who graduated prior to 1980 making them old enough to have missed computer instruction in high school. Many of the workers in these two groups avoid exposure to computers.

Staffing

The Lunchroom Learning project had a part-time coordinator, working 12 to 15 hours per week.

The Lunchroom Learning Coordinator worked for six months. Before and after this term, the program coordinator and volunteers did the project work.

Set-up

Lunchrooms

The physical set-up for the Lunchroom Learning Project consists of two multimedia computers located in two of the Northwood Inc. lunchrooms. The company purchased the computers and some of the software. Other software was made available through the IWA and donations from individuals. The lunchrooms are busy, noisy places so the computer stations were located in the more private

back corners, away from the main traffic. The computers are not locked in metal boxes and the software CDs are not signed out.

As the project progressed, the coordinator became aware there was not an easy way to communicate back and forth with workers. He installed a white board that was heavily used for messages, requests for tutoring and questions. He also put in a mailbox in order to pass on written information.

Crew Meetings

Management at Northwood Inc. agreed to allow their monthly crew meetings to be used to introduce the project to the crews. The E.F.A.P. committee and Morice Community Skills Centre did seven, half hour presentations over a twenty-four hour period. The following issues were discussed.

Q. What is the company up to and what are they trying to find out?

A. Management has absolutely nothing to do with the project other than to provide the space and computers.

Q. What are they going to make us learn?

A. Everyone of us will have to face a computer sooner or later, it can be real scary so here is a opportunity for you to play with one if you want to and if you don't want to that is fine.

Q. Who is running this project?

A. Link to Learning is looking after the project and Jim (the lunchroom learning coordinator) would be there to help with any problems they might encounter. A schedule of his time in the lunchrooms is posted on the wall.

Q. What's going to happen when the computer gets broken or stolen?

A. As for security the computers were put there for you to use, if they get stolen then you no longer have a computer to play with.

Q. What if the company learns our education level and then uses it against us when we bid on jobs in the plant?

A. Employee files would be updated with achievements only. No assessment scores will be forwarded to the company. The company supports the employees working toward their grade twelve.

Rules

There is only one rule, PLEASE do not use the computer while you are supposed to be working, that is the only thing that will shut the project down.

One of the most impressive aspects of this program has been the faith placed in the mill workers by management. The computers are not locked in metal boxes and the software CDs are not signed out. Ownership was given to the workers and they have been most worthy of the trust placed in them, contrary to initial concerns. When the *Dangerous Creatures* CD disappeared, the coordinator posted a message on the white board requesting it be returned. It came back promptly, with the explanation that one of the workers had borrowed it to show his children. No equipment has been abused, stolen or destroyed.

Participation

Computer use in the lunchrooms has been steady for the eighteen months they have been in place. During regular break times they are always in use. Employees will often stay behind or arrive early in order to work on the computers. Some have even come to the mill on their days off to use the machines. There has also been some use of the machines during work time.

The computers have been used for a variety of activities. *Encarta* has been used to look up information for assignments, either for the worker in upgrading class or for the worker's child in school. Several workers used the word processor to produce a variety of documents. Typing tutorials were well used as was golf and some of the other games. The Handyman CD was often used, many times resulting in discussion amongst those present as to the best way to fix a whatever, or the funny "war" stories that resulted when directions were not followed.

One incident the coordinator reported in May 1996, illustrates the demand for the computers. One of the machines was down for several days over the long weekend. Upon returning to work, the coordinator was met by workers wanting it fixed. Several people had noticed and complained. All were anxious to have their computer access restored.

Literacy Issues

We know there are a number of employees at the Northwood mill with low literacy skills. In the discussion that follows, the literacy issue is identified, and followed by our solution or observations.

1. Individuals with low literacy skills will not be able to teach themselves basic computing skills:
 - During the time that we had a coordinator in the mill, he arranged times for one-on-one tutorials and lessons. We also had a high school work-experience student offering one-on-one instruction.
 - Workers were constantly helping each other. Beginners watched others and asked questions, advanced users would keep an eye on beginners, offering assistance when required.
 - Basic computer skills were also taught at the Learning Centre throughout the summers and during fall and winter sessions. These free courses were well advertised at the mill.
 - One of the first observations, made by experienced computer users while helping beginners, was the amount of reading required for any computer task. Experienced users tend to do much of this reading automatically, as they scanned the screen for clues, or quickly accessed the help menus. This exercise of helping a beginner at the computer station became a literacy-awareness lesson for the tutor. Teaching a fearful beginner the computer basics provides long-term computer users with a new awareness of the complexity of computer literacy, and a better understanding of why beginners may have problems or make errors.
2. Workers are uncomfortable with others discovering their literacy levels, particularly if this information is made available to their employer.
 - Several workers “confessed” to our coordinator they had lied on their application form in terms of schooling. As a result we:
 - made it clear to workers that there was no reporting to their employers.
 - did not install a method of signing in or a reporting device on the computer.
 - made it clear that we did not work for their employer. Their participation was completely voluntary.
3. We recognized that literacy should be on the list of referral topics for the family and employee counselling program. Much of this work was underway prior to our project; we worked within the project to further this goal.
 - The Houston Link to Learning coordinator presented a literacy awareness session at the Northwood sawmill to the Employee and Family Assistance Program Committee and the counsellor who meets with clients in Houston.
 - The Employee and Family Assistance Program counsellor met with the Houston Link to Learning coordinator to discuss literacy issues and

services available. The counsellor then made referrals directly to the literacy program coordinator.

4. Once people are comfortable with the computers, they may want to further upgrade their literacy skills.
 - The launch of Lunchroom Learning took place at the monthly crew meetings. The Lunchroom Coordinator and two instructors from the Basic Skills Upgrading attended the 24 hour cycle of meetings, and did personal presentations explaining the two programs.
 - Discussions with the coordinator often focused on where one could go to upgrade literacy skills.
 - Materials and brochures advertising a variety of programs were available at the computer stations.
 - Brochures explaining the volunteer one-on-one basic literacy tutoring program were written specifically for this target group and were made available in the lunchroom. (See appendix)
 - Instructors in the Morice Community Skills Centre Basic Skills Upgrading Lab noted the increased confidence of the students who had used the lunchroom computers. The upgrading lab is a large room with 18 computer stations, with students working independently. For an individual unfamiliar with computers this can be intimidating at first.
 - Northwood Inc., Houston, showed a high response to the upgrading program at the Morice Community Skills Centre.

Outcomes

A major outcome of this project is that the lunchroom is now a place of learning.

The original goals were set out as follows:

1. To provide opportunities for employees to overcome low literacy barriers enabling them to achieve a higher level of literacy.
 - An increased comfort with technology was observed, and interestingly, an increased understanding of safety issues.
 - Workers continue to exchange ideas concerning computer configurations. Those who understand computers share their knowledge with the beginners. The lunchroom coordinator dealt with a wide range of questions from users of all levels, concerning technical set-up and software use.
2. To provide opportunities for employees to overcome their fear of learning new skills.
 - Even the computer “nerds” had to deal with fear of new technology. When first purchased in the fall of 1995 the computers were equipped with Windows’95. The computer experts from the mill, who volunteered for the project, requested more time to learn the new software. All found the prospect intimidating.

- Computer fear is a costly concern for employers. On the job training takes longer and is harder when the worker is resistant to technology and maintains their worries about productivity. Prior to this project, the introduction of new technology to a workstation required a minimum of two weeks training, followed by a period of error-ridden production.
 - Members of the Employee and Family Assistance Program committee reported employees more open to learning new skills and more willing to accept change.
3. To encourage employees to have fun with learning and technology.
 - Several workers were beginner computer users. One worker was so excited about learning, she purchased a floppy disk as her first step towards computer acquisition. She then took advantage of tutorial time and day-off access to the computer stations in order to increase her computer skills.
 4. To provide the worker with the support necessary to move from the lunchroom project to the educational institutions in the community.
 - Two Upgrading Instructors and the Lunchroom Coordinator made mill visits, detailing the two programs and encouraging participation.
 - Workers used the lunchroom computers to complete a homework assignment given during an upgrading lab orientation.
 5. To increase the number of workers upgrading literacy skills.
 - Prior to the lunchroom program there was no separate upgrading class for workers. The launch of the Basic Skills Upgrading program was the first time workers had been offered their own place to upgrade. Numbers of workers upgrading rose.
 - Basic Skills Upgrading instructors observed an increased confidence among the workers from the Northwood mill who had been using the lunchroom computers prior to attending the upgrade lab. In our questionnaire, ½ of the respondents attended the lab, of those 80% used the lunchroom computers.
 6. To increase the awareness of the community literacy needs through workshop training for those volunteering as tutors.
 - Community awareness of literacy needs was raised through formal and informal literacy awareness discussions that were held as part of this project.
 - Students enrolled in the upgrading classes often bring their families and friends to tour The Learning Centre. Active learners often encourage friends and family members to become lifelong learners.
 - Committed students report increased success in persuading their teenage children of the need to stay in school. One of our students reports that three generations of her family are doing homework around her kitchen table in the evening.

7. To act as a pilot project to indicate to mill management that continued education on and off site will provide a more literate workforce.
8. To encourage the partnership between employers, the workforce, the literacy society, and educational institutions within the community.
 - The coordinator was often asked about upgrading programs and college courses. He supplied materials on computer courses as well as technical information. We have continued to use the lunchrooms as a distribution point for Learning Centre brochures and other literacy materials.
 - The launch of the Skills Centre program was paired with the Lunchroom Learning project. This involved several partners.
9. To provide a model other workplaces will use to set up similar literacy programs.
 - We have had interest in what we are doing in this project. Several groups are interested in this report.
10. To provide access to computers.
 - The lunchroom computers were in constant use when workers overcame their computer fears.
 - From the beginning of this project, there has been constant demand for the company sponsored employee computer purchase program. Workers are purchasing computers for their own use, for their children and for their spouses. Many people want their pre-school age children to feel comfortable with computers.

Unexpected outcomes

11. Increasing goodwill between employer and employee.
 - When the program was initiated, it was a condition of Northwood that the machines not be used during company time. There has however, been some computer use during working hours, but Houston Link to Learning has received no complaints from the supervisory level. Perhaps this is because of what Dave Manahan, project visionary, points out. His explanation follows:

No complaints have occurred because it has been seen that the employee is actually building a skill. That skill is flexibility. Whenever they linger a little bit too long on the PC, they work extra hard to ensure that the production line is never behind. During a mechanical breakdown, production can be interrupted causing a backup. The supervisor could say to the worker 'I know that you can catch up. I have seen you work harder after hanging out too long with the computer.' The employee has the flexibility to be able to change the pace of work and catch up.

This potential conflict of workers spending too much time on the computer has not become an issue nor has it been challenged, because it is working to everyone's advantage. Both workers and management have seen computers in the lunchroom as an opportunity and a privilege that no one wants to jeopardize. The impact of the program has been noted by several people who are involved with various employee-related groups at Northwood. They mentioned that a number of people had become more confident using computer technology, resulting in improved self-esteem and self-worth.

12. Increasing confidence, ability, communication and problem solving within the working environment.
13. Increased flexibility on the part of workers, both in terms of time management and task assignments.
 - Company representatives reported a more flexible attitude among the workforce; workers are more willing to look at new job tasks and are more prepared to share tasks with co-workers.

Accomplishment - Computer Fear is Gone

We had one employee express concern about bidding into another area as that would put him too far away from the computer station.

Conclusions

The conclusions for the Lunchroom Learning component of this project are supported by the documentation of the project and experiences observed or shared between service providers and workers.

1. Researching workplace education provided the project with direction.
2. Involving all the partners and the target group right from the beginning brought a great deal of support and expertise to the project.
3. Giving the workers ownership and the voluntary participation of the lunchroom computers program was key to the project.
4. Learning does occur when workers can get over their fear, have fun, and explore some material of personal interest.

5. Accomplishing any new skill boosts self-esteem which assists the worker when transferring the new skill to other situations.
6. Providing the access to learning and the support for learners to be successful is critical for both on and off-site programs.
7. Reading, writing, understanding and communicating in the workplace is more important today than yesterday.
8. Bridging the gap between worker skills and task requirements must continue to be addressed.
9. Learning will happen if individuals, unions, companies, education providers and the curriculum are flexible and meet the needs of workers.
10. Keeping costs minimal for partners and participants was necessary for the project's success.

Lunchroom Learning
was successful because
the focus of the project was the people,
not the technology.

Recommendations

1. Recognize the unique factors in your workplace and research a variety of education programs in order to best meet the needs of your workers.
2. Create meaningful partnerships with all the groups involved throughout the project.
3. Address the issues from the floor level up. Build in flexibility in every aspect of the delivery to allow for broader use by your target group. For example:
 - meet worker needs by offering weekend tutorials at their request.
 - recognize different learning styles and find ways and people to teach all learners.
 - expect increased expectations as far as what the workers want to learn. Know where, when, what and how workers can access more advanced courses and encourage them to go beyond the workplace program to become lifelong learners.
4. When offering programs to workers try to deal with the fear factor first in a non-threatening way.
5. Expect the workers to develop higher skills and improved communication with management.
6. Encourage and provide continued learning opportunities for workers both on and off-site.
7. Recognize the importance of being able to read, write and communicate in the workplace. Workplace education programs should be developed with the local literacy group as a key partner.
8. When planning a technological change, provisions for the training of the workers should have equal emphasis to the equipment upgrade.
9. Ensure all partners understand the importance of flexibility in all aspects of the project.
10. Sharing funding, facilities, staff, resources, programs, and clients keeps costs to all partners to the minimum.

The Link at the Library

Introduction

The lunchroom computers may well meet the computer literacy needs of the workers at the Northwood sawmill, but the rest of the community of Houston was not prepared for the technology revolution. With this in mind, Houston Link to Learning looked for a way to take the lunchroom concept to all members of the community.

Target Group

The Link at the Library was established for community members who did not have a computer at home or did not have an up-to-date computer at home.

Set-up

The public access computers were placed in the Gould Memorial Public Library in Houston. Two multimedia stations were set up there.

Staffing

For the first summer of operations, we assigned a summer student to the library computers during library hours. She was able to assist the rush of new users with basic computer skills, answer related questions and help with software glitches.

Since the initial summer, the regular library staff has assisted the computer users with their questions. Demand for assistance is constant, placing an increased burden on library staff.

Participation

The computer stations are in use 90 - 95% of the time the library is open. The one time they are not in full-time use is during the first hour of operation on Tuesday mornings.

About 75% of the users are regular, repeat users.

Approximately 1000 individuals have used the computers between July 1995 and May 1997. There were 255 recorded users in May 1997.

The librarian also notes that the library is busier, in terms of people coming in, however book circulation was down initially. This tendency has since reversed. The library is setting records in term of patrons and numbers of books borrowed.

Internet access was established in the summer of 1996. Internet surfing remains the number one use of the library stations. The Internet installation created a second rush of new users.

Literacy Issues

1. People with low computer literacy skills will require assistance when working at the computer stations.
 - Eighteen months into the project, the librarian reported she was assisting beginner computer/ Internet users several times a week.
2. People not familiar with computers will resist using the computerized card catalogue.
 - Having the public access computer sites created a natural transition to the introduction of the automated card catalog and checkout system. The Houston Public Library began using the computerized checkout and catalogue in March of 1997. Although it was not planned to be a precursor to the automation project, the librarian reports users were very responsive and already familiar with the technology from using the public access sites.
3. Children love to play computer games, and would rather play than read.
 - Computer users are limited to half-hour time blocks. When they are finished on the computer, they often hang around looking at the books or magazines.
 - With many computer games there is a substantial amount of reading, particularly for the child wanting to master the game.
 - Many of the children frequenting the computers were not library users prior to the sites being established.

Outcomes

1. Library use has increased.
2. Demand for computer stations is high.
3. Demand for an ability to print documents is high.
4. After seeing the success of the *Link at the Library*, Houston Link to Learning donated some older equipment to the Houston Parent Participation Pre-school. It is a very popular play station with the children.
5. Community computer literacy skill levels have increased as a result of this project.
6. The library stations were so popular, Houston Link to Learning donated the equipment to the library to ensure continued public access.

Conclusions

1. The high use confirms the need for public access computer stations.
2. Much of the general public is still behind where they want to be in terms of computer knowledge.
3. Many people have a fear of computers that keeps them from functioning comfortably with today's technology.
4. Individuals and families are comfortable with the library being a place of learning where skilled workers are able to assist patrons.
5. Librarians stimulate the public to participate in further learning opportunities in the community, both in the computer field and beyond.
6. The Internet has broadened the scope for research at the library.
7. The production of documents is a secondary but important use of the stations. Users are expanding their writing skills by publishing completed documents.
8. Computer use requires varied amounts of reading, not only to expand knowledge but also to comfortably perform basic computer operations.
9. Knowledge of the basic computer commands assisted with the integration of the automated card catalogue.
10. Partnering with a public facility kept costs within reach, both for the project and the users.

Recommendations

1. Think beyond the traditional locations when setting up public access to computers.
2. Be prepared with extra staff or volunteers for the first two to three months after the introduction of public access computers and Internet sites to assist patrons with marginal computer skills.
3. Include training for the public when introducing new technology. Realize learning through play can remove the fear of computers.
4. Locate public access computers in public libraries where there are trained librarians who can assist patrons in their research, creating many opportunities for the family to learn together.
5. Ensure library staff is knowledgeable in terms of educational opportunities within the community.
6. Provide public access to the Internet at the library; consider a fee-for-service if necessary.
7. Provide access to a printer for at least one of the stations. Consider fee for service if necessary.
8. Encourage reading of on-screens hints as a way to improve computer skills. Promote the integration of how-to-books with the use of computers for new and advanced users.
9. Use public access computers to smooth the public's transition to the new automated card catalogue and related computer operations.
10. Design public access to computers in an affordable way for both the user and the provider.

Computer Camps

Introduction

Human Resources and Development Canada offer a program to provide students with jobs for the summer. They are most interested in funding positions that allow for the student workers to learn valuable skills. We saw an opportunity to hire skilled students to teach the community necessary and desired computer skills.

Staffing

Personnel for the summer camps came from the Summer Career Placement Program. We were able to hire two students, for 35 hours each per week, at minimum wage.

The students were either university or university transfer students. They worked for 12 weeks, and were responsible for the entire program. They did the marketing, and planned, scheduled, taught and evaluated the classes. For four years running, we have had very talented, dedicated students. While the pay is only minimum wage, the job experience is substantial. Through word of mouth, we now have students coming to see us in January, asking about our summer program jobs.

During the fall of 1995, and the winter of 1996, we continued to offer the free Super Basic Computer course to adults in the community. We are now into our fourth winter for these courses. Interest continues to be high. Staff and volunteer personnel taught these sessions.

Set-up

The physical setting for the computer camps is the Northwest Community College computer lab, which is not traditionally in use for other courses during the months of July and August. Northwest Community College donated the use of the lab in order to make the camps possible.

All the camps are offered free of charge.

Participation

The computer camps are immensely popular. The first day of registration often fills most of the camps for the younger children, and provides 30-50% of the attendance in the other classes.

Some adults choose to take more than one camp. After finishing the basic class, they go on to the spreadsheet workshop or the word processing classes. Other students have chosen to repeat the basic workshop two or three times.

Several seniors have attended classes prior to purchasing a computer. Some return to repeat the class after making their purchase. In about half the cases, seniors were acquiring their children's old equipment.

Adults will often sign up for regular computer classes offered by the college, after trying out the free camps.

Participants often make use of the public access computers at the public library after attending a camp.

Literacy Issues

We have observed low literacy individuals are attending these classes. Twice this year, individuals telephoned requesting information from the brochure they had in front of them. We read the brochure aloud to them, and helped them determine the best class for their interest, ability and time restrictions.

The camp instructors attend a low literacy awareness workshop to prepare for the lower skilled student. They are comfortable explaining and referring students to the one-on-one tutoring program when interest is shown.

Hesitant adults often attend with their children to observe the tone and style of the class. If they feel comfortable, they enroll in the adult classes.

In any population, expectations are that people aged 60+ would have the lowest overall computer literacy. We have observed that seniors are often referred to the class by their children. They may be a resistant group of learners. They are not attending because they want to, but rather because they *have been told* they should learn this technology or they *know they have to* learn it. In general, the women are comfortable with the keyboard, but still concerned about the technology. Many of the men find that their lack of finger flexibility makes the keyboard and mouse difficult to use. Again, as a generalization, this group needs the most help and time to develop their basic skills.

Several instructors are on hand for each course. Class size is fourteen participants. Depending on the material to be covered and the enrollment, three and sometimes four instructors are available. While Houston Link to Learning has only 2 students hired to do the camps, the other partners in The Learning Centre see the value in these camps and willingly donate their summer workers to assist when needed.

Conclusions

1. People of all ages, education levels and cultural backgrounds are lacking the skills to feel comfortable using a computer.
2. Short simple sessions that focused on basic computer functions were most popular.

3. Student instructor ratio was kept low as many of the students needed full time one-on-one assistance.
4. The Summer Career Placement students were very successful as instructors due to their enthusiasm, computer skills and low literacy awareness training.
5. The Summer Career Placement students designed and implemented the camps, including advertising, registration and lesson plans. They were given ownership and took responsibility to ensure the program was successful.
6. Having the partnerships allowed for the sharing of resources including classrooms, computers, and photo copying. This kept the cost of the project minimal and the sessions free to the users. Attendance was recorded and reported for the college.

Recommendations

1. Be aware of the diversity of the target group. Design a flexible program to fit their needs. Expect a high demand.
2. Provide learner-centered instruction focusing on basic computer commands. Maintain flexibility within the lesson plan.
3. Keep the instructor to student ratio low, in the 1:5 or 1:4 range. Be prepared to work one-on-one with students for portions of the lesson.
4. Have instructors who are well trained and understand the needs of the students and are able to work with a diverse target group.
5. Give control of the entire camp program to the instructors. This includes advertising, lesson plans and registration.
6. Provide free camps. Keep project costs minimal by partnering with education providers and other agencies to access funding, personnel and resources.

Community Computer Literacy

Outgrowth Goals and Objectives

Houston Link to Learning agrees with the other partners and participants that the Lunchroom Learning computer stations continue to be maintained.

For the Houston Lunchroom Learning project we are recommending the Morice Community Skills Centre partner with Northwood, and use the computer stations to promote literacy upgrading for millworkers. We would encourage them to expand the project with input from the Employee and Family Assistance Program committee and other interested parties.

Houston Link to Learning will continue to provide information at the computer stations concerning the literacy education available.

Houston Link to Learning will be responsible for following-up on the recommendations of this report. We will maintain and nurture the partnerships built during this project.

The coordinator of Houston Link to Learning will maintain contact with the Employee and Family Assistance Program committee and the counsellors who service the Houston area.

Houston Link to Learning will continue to stay involved in the library's pursuit of increasing the literacy skills of the community. We will continue to be involved in formal and informal partnerships on projects large and small.

Houston Link to Learning, in partnership with Northwest Community College, will continue to offer free computer camps as long as funding for summer student positions is available. We will continue to offer students invaluable work experience.

Houston Link to Learning, in partnership with Northwest Community College, will continue to run the free basics workshops during the winter season.

Houston Link to Learning will research the needs and wants of community seniors to ensure basic computer skills training is available to this group.

Houston Link to Learning will continue to pursue and be involved in computer literacy outreach projects.

Appendix

Houston Link to Learning Questionnaire Summary

Lunchroom Learning

Total Returned	30
1. Did you use the lunchroom computers?	13 Never 10 A couple of times 6 Several times 1 Lots of times
2. Do you have a computer at home?	21 Yes 9 No
3. Were you a beginner computer user when you first used the lunchroom computers?	12 Yes 12 No 6 Incomplete
4. What programs did you use?	15 Games 4 Microsoft Works 10 Typing Tutor 1 Other (Paint Program) 13 N/A
5. Have you taken any computer courses?	11 No 3 Dogwood 4 Basic Computer 1 Yes at Northwest Community College 1 Lotus 1 - 2 - 3 1 C.N.C. Manufacturing 1 Word Perfect 5.0 Course 1 Programming with Pascal 1 (Computers) 040 2 Not allowed to complete ² 1 Computer Science 1 Business 5 Incomplete
6. Have you attended the Morice Skills Centre Upgrading Lab?	15 Yes (12 of these use the lunchroom computer) 15 No
7. • What would you like to see happen to the computer stations now? <i>7. continued</i> What would you like to see happen to	6 Internet access 4 Keep them in the lunchrooms 2 More computers 2 New games (quick game e.g. Solitaire that could be played by interested participants with a bonus for the winner(s)) 1 More computer time 1 Moved on scheduled times for wanting employees

² Two students encountered a funding glitch early in the program. We hope to have them complete Computer 040 soon.

the computer stations now?	1 Be privately enclosed for personal privacy 1 Occasional cleaning 14 Incomplete
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8. We would appreciate any other comments on the Lunchroom Learning Project.	3 Good idea. 1 Most games and programs have been removed or deleted (upstairs sawmill lunchroom). 1 We need a cleaner environment to have the computers situated in (too much dust!). 1 We need an instructor a few times a week to show us how to use it. 1 Appreciation of effort to make computers available 1 Isolate computers for privacy 1 Lunch time is not optimum time for learning (4:00 a.m.). 1 I would like to learn how to write programs. 1 We should have two computers. 1 Computers should be located somewhere other than the lunchroom (too much noise; too many distractions; too much food and drink being consumed at computer stations). 1 Repair the computer in the upstairs sawmill lunchroom. 21 Incomplete
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Participant Response

The Morice Community Skills Centre conducted telephone interviews³ with upgrading program participants in the fall of 1996. The following two samples are representative.

Participant One

“I didn’t even know how to turn a computer on before coming to the program. I really enjoy using computers and would like to learn a lot more about it.”

“I have found the upgrading course has really helped me get back into reading and I now know some math that I have never heard of before. I got my GED because of the upgrading and I also enjoy coming here.

Personal benefits I find reading a lot easier and I tend to read more. I now know things in math that I either forgot or had never taken. I only completed grade 10.”

“I was surprised at how fast you can learn and realize how much you really do know with just a bit of help.”

Participant Two

(I had no experience) *“None!”* (with computers before starting the program.)

“I found stimulation in actually working my mind academically. Our jobs are routine and more physical, than mentally challenging.”

At work *“It (upgrading) has increased my self-confidence and reminded me that I am intelligent.”*

Personal benefits - *“I feel more confident. There are those who attempt to make you feel inferior. This was my way of proving myself to myself.”*

“To find that you are still capable of working academically after a number of years is a great experience.”

³ Vivien Millen conducted the interviews. These responses came from the raw data from two of those interviews.

Houston Link to Learning Questionnaire Summary

Library Public Access Computers

Total Returned	20
1. Did you use the library computers?	2 Never 4 A couple of times 8 Several times 6 Lots of times
2. How old are you?	4 Under 14 6 14-18 1 19-25 9 Over 25
3. Do you have a computer at home?	7 Yes 13 No
4. Were you a beginner computer user when you first used the library computers?	7 Yes 13 No
5. What programs did you use?	7 Games 8 Microsoft Works 20 Internet 1 Other Encyclopedia Reference
6. Have you taken any computer courses?	12 No 2 School 2 Yes at Northwest Community College 1 Yes - University and College 1 Yes - Basics (Super Basics see Computer Camps)

<p>7. The computers are now owned by the library. What would you like to see happen to the computer stations in the future?</p>	<p>7 More computers 3 e-mail access -would be willing to pay 1 more Internet access 1 be privately enclosed for personal privacy 2 open more hours 1 more time on computers 1 less time for chat line use 1 faster, better Web browsers 1 is it possible to link to genealogy libraries 7 Incomplete</p>
<p>8. We would appreciate any other comments on the Library Public Access Computer Project.</p>	<p>1 My kids and I really enjoy this service and would like to see it expanded. 1 I am glad of the computers being here. 1 Very reliable help from staff. 1 Internet is fun and useful. 1 Go longer on the computer. 1 Good services, private 1 Nice to have public access 1 Excellent opportunities for learning and accessing new ideas. 1 Great system 11 Incomplete</p>