Launching Literacy and Technology

For some, full sail ahead;
for others, rowing by ash breeze
Six Good Reasons to use Information and Communications Technology (ICT)
1. Computers and the Internet are useful in our personal lives and in our students’ lives, for example, for:

- **Communicating** with family and friends: e-mail, key pals, electronic lists, digital telephony, electronic chatting with friends and colleagues in distant places

- **Shopping**: airline tickets, books, CD's, computers, cars

- **Information searching**: “Googling,” finding lost friends, reading newspapers (in one's first language,) finding directions, etc.
• **Managing personal finances:** paying bills, banking online

• **Entertainment:** home movies, baby book
  Web pages for relatives afar, video games, music, ordering DVD movies
2. Computers and the Internet provide useful tools for tutors and learners to accomplish learning tasks:

- **Word processing**: writing in class and homework
- **PowerPoint presentations**: by tutors and learners
- **Spreadsheets** for financial literacy: planning and monitoring one's personal spending
- **Information searching**: CD ROM and Web-based references such as encyclopedias and dictionaries, using search engines to find information on Web pages, or in Web databases
3. Computer software, Web pages, TV broadcasts and videotapes are a source of direct instruction.

- Computer-assisted instruction (CAI) or computer-assisted language learning (CALL) for English Language learning
- On-line and CD-ROM-based courses
- Instructional Web pages, and
- Television series such as NALA’s Read Write Now, or the U.S. TV411, Crossroads Cafe, or Workplace Essential Skills

offer learners organized instruction for independent learning, and extensions of tuition.
• **Online lessons and whole courses** can be designed by tutors for their students, and can track learner progress [http://www.thestudyplace.org](http://www.thestudyplace.org)

• **Online simulations**, for example basic skills in the workplace simulations, can be used independently by learners or with a tutor or in small groups [http://www.workingsimulations.com/theOffice.html](http://www.workingsimulations.com/theOffice.html)
4. Technology provides new opportunities for professional development such as:

- **Electronic lists/forums** for adult literacy and ESOL/ESL tutors.
  [http://www.nifl.gov/lincs/discussions](http://www.nifl.gov/lincs/discussions)

- **Special collections of full-document (downloadable) materials** in areas such as family literacy, ESOL, workplace education, technology, assessment, health and literacy, learning disabilities, and others.
• Online professional development courses, resource books, guides, and manuals for adult education tutors

http://www.alri.org/harness/harnesscolleague.html
5. Technology offers excellent tools for project-based learning

- Tutors can add project-based learning to their classes (in addition to skills-based and content-based learning.) Technology is useful when adult learners need to:
  - search for information (CD-ROMS, Web page and online database searches)
  - investigate jobs and job preparation, family health issues, childcare, public schools, higher education, home buying assistance and other community services. [http://alri.org/esquare/](http://alri.org/esquare/)
- **record findings** (word processing, note taking using portable keyboard pda's or laptops, tape and videotape recorders, cameras, scanners)
- **word process reports**
- **publish or present their projects** (using desktop publishing, Web pages, or PowerPoint)
6. Technology can help learners who have physical or learning disabilities (or differences) through the use of assistive technology and universal design.

- [http://www.cast.org/](http://www.cast.org/)
The Massachusetts Adult Literacy Technology Team (MALTT) Plan

“Never underestimate the ability of a small group of committed individuals to change the world. Indeed they are the only ones who ever have”

Margaret Mead, Anthropologist
This is a plan for incorporating technology, primarily computers and videocassette equipment, in adult literacy education programs across Massachusetts. Its purpose is to enable adult basic education students, those at the basic and pre-college levels, enrolled in publicly-funded adult literacy, adult basic education, adult secondary education or English for Speakers of Other Languages programs, to access and use technology for learning, finding information, and for communication. Its promise is to enable the parents of K-12 children and other adult residents of the Commonwealth who are pursuing basic skills instruction to access and acquire the technology skills they need to help their children and themselves at work, at home, and in their communities in the Massachusetts of the twenty-first century."
“This plan calls for a major investment in information and communication technology in adult basic education programs, one which will prepare adult learners to use technology skillfully and comfortably at work and in daily living tasks such as writing letters, keeping track of family expenses, getting family health information, finding a job, finding childcare, shopping, paying taxes, and recording family events. In a state which depends for economic growth on a highly skilled workforce, one whose companies increasingly"
E-inclusion/Access to Technology/
Closing the Digital Divide

• The Rand Corporation Study of 1995,
  *Universal Access to E-mail*
• The Pew Foundation Study of 2003
In 1995, in its ground-breaking study, Universal Access to E-mail, the Rand Corporation identified a problem and coined the term "the Digital Divide," to describe it. The problem was the huge gap between the well educated and well-to-do, who had access to the Internet, and the great majority of Americans, especially the poor and poorly educated, who did not. That study urged that everyone in the U.S. should have e-mail within a decade, unbelievable at the time, closer to reality now, but still far from being achieved.

Where are we now, almost nine years later?

A late 2003 Internet use study by the Pew Foundation found that 63% of Americans use the Internet at home now. This is a huge increase over the fewer than 5% of Americans who used the Internet in 1993. The rate of growth, however, has plateaued in the past two years.

Incidentally, the Pew study found that Internet users do more online now, such as: getting health information, accessing government data, buying products, and participating in on-line auctions.

Source:
Pew Internet & American Life Study
http://www.pewinternet.org/
One likely outcome, if growth of Internet access continues, is access to online learning for adult literacy, basic skills, and secondary level skills. This might enable us to serve more people, or serve those who attend classes with a more intensive service plan of both class and online instruction. But growth in Internet access for low-income adults will depend on continued government support to libraries and community technology centers to support their access and use of the Web for learning.
Web Resources for Tutors who are new to Technology
What's "out there" that's good?
Where can I start as a beginner?

- The Literacy List
  http://www.alri.org/literacylist.html
- Harnessing Technology to serve Adult Literacy
  http://www.alri.org/harness.html
- LINCS http://www.nifl.gov/lincs
  In the U.S. LINCS is the adult literacy community's gateway to the world of adult education and literacy resources on the Internet. LINCS features multimedia curricula developed by practitioners, special collections on major literacy topics, the latest literacy-related research and statistics, and opportunities for communication with colleagues directly and through online discussion.
• LINCS Special Collections
  http://www.nifl.gov/lincs/collections/collections.html

• LINCS Discussion Lists
  http://www.nifl.gov/lincs/discussions/discussions.html
What are some good examples of Web-based reading, writing and numeracy instruction for low-literate adults?

- Rebecca's EZ Pages
  
  [http://www.alri.org/ltc/ezpage/](http://www.alri.org/ltc/ezpage/)

  One of the exercises, "What the Landlord Must Do," teaches students basic terminology about housing and landlord responsibilities. Then, it provides a written exercise in which the student explains the responsibilities and also describes the functions of certain parts of the house. The Web site gives the student a list of words that link to pictures about parts of a house. Or the user can click on different parts of a sketch of a house, which then show the appropriate word. The interaction between text and pictures, along with the written exercise, allows students to go back and forth between the pictures and the words as much as needed to succeed at the tasks.
• **E-square**  [http://www.alri.org/esquare](http://www.alri.org/esquare)
  This is an "electronic square" or village designed for adult learners with low basic literacy skills. There are a number of storefronts (health center, jobs center, library, family center, computer center, early childhood center, community arts center, and homebuying and rentals center) with low-literacy content inside, much of it written by adult new readers and writers.

• **Mathgoodies**  [http://www.mathgoodies.com/](http://www.mathgoodies.com/)

• **The Office**  [http://www.workingsimulations.com/theOffice.html](http://www.workingsimulations.com/theOffice.html)
  This is an interactive, Web-based prototype of a workplace-oriented simulation for learning literacy, numeracy and office skills simultaneously.
• **The Learning Edge** [http://www.thewclc.ca/edge](http://www.thewclc.ca/edge)

*The Learning Edge,* is an interactive, on-line newspaper for adult literacy students. It is produced by the Wellington County Learning Center, in Arthur Ontario. Its interesting, topical stories are plainly written for a range of learners. Each story is read out loud slowly by a man with a pleasant voice, and is accompanied by learning activities such as games, puzzles, interactive quizzes and writing contests. At least one of the stories, which supports both literacy and numeracy, deals with the low wages of workers in Indonesia who make expensive shoes for North Americans. Some stories it is claimed, will be dealing with race, gender and age issues. *The Learning Edge* also has student writings.

• **The Northern Edge**

The Learning Ladder
http://www.learningladder.org
An online, intermediate level, 60-hour literacy curriculum for early childhood educators in the context of early childhood education work. This is designed to help workers in child care centers brush up on reading and writing before entering community college certification courses in early childhood education. Participants meet with a tutor once a week and use the online curriculum 2-6 hours per week.
Project-based Learning and the Web

• Virtual Visits http://alri.org/visits/vv.html
• The International Classroom Virtual Visit Project http://www.otan.us/webfarm/emailproject/school.htm
• WebQuests http://www.youthbuild.org/learningnetwork/webquests.html
• Inquiry Maps http://alri.org/pubs/im.html
What is the scope of Adult Illiteracy in the United States?
“For instance, using data from UNESCO, the United States is much like many Third World countries in terms of the absolute numbers of adult illiterates living in the nation. For comparison, here are some developing nations, the estimated numbers of illiterate adults they include, and the percentage of the adult population that is illiterate (data for 1995):

- Iraq: 4,848,000 (42%)
- Mexico: 6,246,000 (10%)
- Afghanistan: 8,169,000 (69%)
- Sudan: 8,507,000 (54%)
- United States: 10,000,000 (5%)

As these data show, while the United States has the lowest rates of adult illiterates among these nations, there are more than twice as many illiterate adults in the United States as in Iraq. There are 37% more adult illiterates in the United States than in Mexico, our neighbor to the south, and there are more illiterate adults in the United States than in either war torn Afghanistan or famine/war torn Sudan. In fact, out of 105 Third World, developing nations for which UNESCO provided statistics in 1995, only 9 have a greater absolute number of illiterate adults than the United States.”

Thomas Sticht, International Researcher in Adult Literacy, in a post to the AAACE-NLA e-list on 29.3.04