

Computer Technology in the Classroom 101

By Laura Turner

An HTML version of this article is also available. The HTML version provides hot links to the huge collection of URLs mentioned.

Teachers have come a long way in the last 15 years. It was not long ago that there were no computers in the classroom. There was no World Wide Web, no Internet, no digital cameras, no scanners and certainly no computers in the classroom. Networking was something you did with colleagues and computers were housed in large rooms, usually basements of some large university or business building. My, how things have changed. Not since the introduction of the blackboard have teachers seen any single piece of equipment impact teaching and teaching fundamentals in the way that the computer in the classroom has.

Today, to be a competent teacher at any level, you must know how to use computer technology and how to use it well in your classroom. The time has come where it is no longer acceptable for teachers to be technology illiterate. Many teachers have had the experience where their students know more than they do, even in computer fundamentals. This must not continue to happen or the quality of education will start to drop, instead of continuing to climb. To be a technology savvy educator, you should have most or all of the following skills. These are the skills every teacher should be familiar and comfortable with to truly begin to integrate the use of computer technology in the classroom. How do you rate?

1. A teacher should be able to send and receive e-mail and send attachments.
2. A teacher should be able to copy data or files from floppy disk to hard drive and visa versa.

3. A teacher should be comfortable with and be able to use Word Processing software on a regular basis.
4. A teacher should be comfortable with and be able to use Spreadsheet software on a regular basis.
5. A teacher should be comfortable with and be able to use Presentation software (PowerPoint and HyperStudio) on a regular basis.
6. A teacher should be able to understand the Windows Operating System for PCs or the OS Operating System for Macs. A teacher should be familiar with both the PC and the Mac.
7. A teacher should understand and have created their own Web page.
8. A teacher should be able to use the Internet efficiently for such tasks as searching and downloading.
9. A teacher should be able to use a digital camera.
10. A teacher should be able to use a scanner.

Resources Related to Each Skill

1. A teacher should be able to send and receive e-mail and send attachments.

- L. Turner's Educational Web Portal: <http://www.bhsu.edu/education/edfaculty/lturner/edportal.htm>
- WebTeacher – Your Source for Web Knowledge: <http://www.webteacher.org>
- Managing E-mail In and Out of the Classroom, from Microsoft: <http://www.eu.microsoft.com/education/tutorial/online/emailHome.asp>
- Outlook Express in the Classroom, from Microsoft (very good): <http://www.actden.com/oe>

ITMA Studio - Tutorials: <http://www.itma.vt.edu/studio/tutorials.htm>

2. A teacher should be able to copy data from floppy disk to hard drive and visa versa.

- L Turner's Educational Web Portal: <http://www.bhsu.edu/education/edfaculty/lturner/edportal.htm>
- Indiana University Knowledge Base: <http://kb.indiana.edu/data/ahyy.html?cust=8412>
- How to Copy Data Files to a Diskette: <http://4h.ifas.ufl.edu/4hbr/copybkup.htm>
- Information for the Mac user in regards to copying data to and from disks: <http://www.cse.ucsc.edu/~charlie/classes/60g/spring97/notes/node84.html>

3. A teacher should be comfortable with and be able to use Word Processing software on a regular basis.

- Word Processing Tutorials on the Web for Microsoft Word from the Rodman Public Library: <http://www.rodmanlibrary.com/rpl/activities/word-tutor.htm>
- Online Word Processing Tutorials for Word, Works, Apple/ClarisWorks, and WordPerfect, from the University of Alberta: <http://www.quasar.ualberta.ca/edpy202/tutorial/wpwtut/wpweb.htm>
- Word Processing Tutorials for Word from the Educational Technology Center at Malaspina University: <http://web.mala.bc.ca/etc/resourc/students/wordproc.htm>

Learning to Use Microsoft Word from the University of Manitoba: <http://home.cc.umanitoba.ca/~turner/wp.html>

Word Processing with AppleWorks from Buddy Project.org: <http://www.buddyproject.org/tool/tutor/wordpro/default.asp>

4. A teacher should be comfortable with and be able to use Spreadsheet software on a regular basis.

- Spreadsheet Resources from Educational Technology Training Resources: <http://www.davis.k12.ut.us/etc/cathy/Sprdsht.htm>
- Software Tutorials, by ClassZone: <http://www.classzone.com/fun/tutorial/software.htm>
- Microsoft Excel (Mac and PC), by the Memphis City Schools: http://www.memphis-schools.k12.tn.us/admin/tlapages/on-line_excel.htm

5. A teacher should be comfortable and be able to use Presentation software (PowerPoint and HyperStudio) on a regular basis.

PowerPoint

- PowerPoint tutorials by ClassZone: <http://www.classzone.com/fun/tutorial/software.htm>
- PowerPoint tutorials from Montana State University – Billings, Montana: <http://www.msubillings.edu/support101/Faculty/PowerPointTutors.htm>
- PowerPoint Tutorial, compiled by Ann Henderson: <http://asterix.ednet.lsu.edu/~kfossey/ppthelp.html>

PowerPoint Self-Guided Lessons,
by Jeri Holt: http://www.memun.org/resources/public/PDF_Data/powerpt/default.htm

Introduction to PowerPoint,
by the University of Guelph
in Ontario, Canada: <http://www.tss.uoguelph.ca/resources/tt/pp.html>

Online Tutorials & PowerPoint
Presentations, by Grand County
School District, Moab, Utah:
<http://www.grand.k12.ut.us/tech/training/tutorials/index.html>

HyperStudio

HyperStudio Online Tutorial and
Resources, by Building Learning
with Technology: <http://www.education.umd.edu/blt/hyper.html>

HyperStudio Tutorials Online:
http://www.dg58.dupage.k12.il.us/teacher_resources/HyperStudio%20Web/hyperstudio.htm

A listing of various links to HyperStudio online tutorials and resources: http://www.libsci.sc.edu/shannon/761Webpages/panels/_themes/hyperstudio/761hyperstudio3.html

www.libsci.sc.edu/shannon/761Webpages/panels/_themes/hyperstudio/761hyperstudio3.html

HyperStudio tutorials,
by ClassZone: <http://www.classzone.com/fun/tutorial/software.htm>

Educational Software Tutorials
– HyperStudio by Exworthy
Education Links: <http://home.socal.rr.com/exworthy/pgm.htm#Mac%20and%20ClarisWorks>

6. A teacher should be able to understand the Windows Operating System for PCs or the OS Operating System for Macs. A teacher should be familiar with both the PC and the Mac.

Windows for PCs—95/98/2000/XP

Free operating system tutorials
and tips for BeOS, DOS, Mac,
Unix, Windows, OS/2 & more:
<http://www.knowledgehound.com/topics/OSs.htm>

Windows Operating Systems
Resources: <http://www.refdesk.com/win95.html>

Windows 95/98 Tutorials
from Montana State University –
Billings Montana:
<http://www.msubillings.edu/support101/Faculty/WindowsTutors.htm>

Working Better with Windows98,
In and Out of the Classroom:
<http://www.newwaverly.k12.tx.us/res/microsoft/classroom/win98/better.htm>

ITMA Studio Tutorials <http://www.itma.vt.edu/studio/tutorials.htm>

Educational Software Tutorials –
Windows by Exworthy Education
Links: <http://home.socal.rr.com/exworthy/pgm.htm#Mac%20and%20ClarisWorks>

Automated Tutorials page for the
Windows XP operating system:
<http://www.ita.sel.sony.com/support/tutorials/lib/windowsxp.html>

Online Tutorials: <http://www.ecesc.k12.in.us/tutorials.html>

Tech Self Help – Troubleshooting
Links: http://www.cap.nsw.edu.au/tech_help/tech_help.htm

OS for Mac – 7.6–9.0

A Beginner's Guide to the Mac
(These tips are shown using OS
8.6 and 9. Most will work with
OS 8.1 and above): <http://www.macoptions.com/os85>

ITMA Studio Tutorial: <http://www.itma.vt.edu/studio/tutorials.htm>

Tech Self Help – Troubleshooting
Links: http://www.cap.nsw.edu.au/tech_help/tech_help.htm

Apple's site for tutorials: <http://www.info.apple.com/support/downloads.html>

A listing of various links to Mac
OS tutorials, by Indiana University
Knowledge Base: <http://kb.indiana.edu/data/agee.html>

The Mac Corner, by the Central
Kentucky Computing Society: <http://ckcs.org/sigs/mac/mac.htm>

An overview with tutorial type
information for the Mac OS 9, by
Vicki Brown: <http://www.mactech.com/articles/mactech/Vol.15/15.11/MacOS9/index.html>

Macinstruct—Free Mac tutorials,
training, and education: <http://www.macinstruct.com>

The Macintosh Index, by the
San Gabriel Valley Mac Users
Group: <http://www.sgv mug.org/Pages/MacIndex.html>

Conquering Your iMac: A listing
of various tutorials and related
information: <http://www.rboproductions.com/esdcourses/imac/imac.htm>

7. A teacher should understand and have created their own teacher's Web Page.

Creating Web Pages with Claris
Home Page, by Lynn Lary
and Sam Miller, Oregon US
West/NEA Teacher Network:
<http://www.wallowa.k12.or.us/cyberschool/learning/support/chptutorial.html>

Creating Web Pages Using
Netscape, by Babson College:
<http://faculty.babson.edu/hotchkiss/tutor/goldpage.htm>

ITMA Studio Tutorials: <http://www.itma.vt.edu/studio/tutorials.htm>

Creating Web Pages with Microsoft FrontPage, by Diana Eggers: <http://www.learningspace.org/tech/FrontPage/index.htm>

A portal type of site by the Loess Area 13 Education Agency that has numerous links that contain a variety of information that will help teachers and students create better web pages: http://www.aea13.k12.ia.us/technology/creating_web_pages.htm

Creating a Web Page with Netscape Communicator: <http://lone-eagles.com/netscape.htm>

Creating Web Pages Using FrontPage Express, by LSE Website Services: <http://www.lse.ac.uk/web/fp-express/research/tutorial/intro.htm>

Resources for Creating Your Own Web Home Pages: <http://teams.lacoe.edu/documentation/Internet/webpages.html>

Pixelloom's Links to Info for Creating Web Pages: <http://www.pixelloom.com/tutor/tutor.htm>

Learn to Make Web Pages Using FrontPage Express or Word97, by Sam Friedman: <http://www.mtpts.com/hs/webpage/html>

8. A teacher should be able to use the Internet efficiently including the following skills:

- Understanding what the Internet is and that the World Wide Web is part of the Internet and not the same thing.
- Knowing how to log onto the Internet
- Understanding and using the Favorites function (in Internet Explorer) or the Bookmark function (in Netscape Navigator)
- Knowing how to download

clipart for use in other programs and being aware of the copyright issues

- Knowing how to download freeware (free software programs) from the WWW, for use in their classroom
- Using Educational Web Portals to quickly find WWW resources for use in the classroom
- Understanding Internet filtering software
- Understanding what search engines are, the different types, and how to use them

Web Basics

Kathy Schrock's Slide Shows: <http://school.discovery.com/schrockguide/shows.html>

Welcome to the Web: <http://www.teachingideas.co.uk/welcome>

Beginners' Central: <http://www.northernwebs.com/bc>

The University of Albany Internet Tutorials: <http://library.albany.edu/internet>

net.Tutor: Your Personal Guide to Understanding the Net: <http://gateway.lib.ohio-state.edu/tutor/index.html>

ITMA Studio Tutorials: <http://www.itma.vt.edu/studio/tutorials.htm>

About.com's Internet 101 Tutorial Gwen Schertel, About's Internet for Beginners Guide will take you through a FREE six-week course especially designed for beginning Internet users: <http://specials.about.com/channels/internet/net101/index.htm?sourceid=00143200522737187648>

RDN (Resource Discovery Network) Virtual Training Suite: <http://www.vts.rdn.ac.uk>

Internet Island: If you want to learn how to use the Internet in a classroom, start here. Internet Island is designed to be a safe environment where novice

Internet users learn and practice navigation skills: <http://www.miamisci.org/ii/>

Newbies Anonymous: A Newcomer's Guide to the Internet: <http://www.geocities.com/TheTropics/1945/index1.htm>

L. Turner's Educational Web Portal Downloading clipart/freeware and information on Internet filtering software: <http://www.bhsu.edu/education/edfaculty/lturner/edportal.htm>

Web Searching

Finding Information on the Internet: <http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/FindInfo.html>

Seven Steps to Better Searching: <http://edweb.sdsu.edu/WebQuest/searching/sevensteps.html>

Untangling the Web: Guidelines for Researching on the World Wide Web: <http://www.closeup.org/untangle.htm>

Find it on the Internet: <http://luna.moonstar.com/~marion>

Finding Data on the Internet: <http://nilesonline.com/data>

NetLearn: Internet Learning Resources Directory: <http://www.rgu.ac.uk/~sim/research/netlearn/callist.htm>

Pandia Goalgetter Internet Search Tutorial: <http://www.pandia.com/goalgetter>

How to find material on the Internet that you want to save to your hard disk or to a floppy disk: http://www.nf.sympatico.ca/Sympatico_Help/Learn/help25.html

L. Turner's Educational Web Portal—Use the Search Engine and Deep Web links: <http://www.bhsu.edu/education/edfaculty/lturner/edportal.htm>

Web Evaluation

The Good, The Bad, & The Ugly—Why it's a Good Idea to

Evaluate Web Sources: <http://lib.nmsu.edu/instruction/eval.html>

Bare Bones 101: A Basic Tutorial on Searching the Web: <http://www.sc.edu/beaufort/library/bones.html>

Evaluating Web Resources: <http://www2.widener.edu/Wolfgang-Memorial-Library/webevaluation/webeval.htm>

Internet Detective: an interactive tutorial on evaluating the quality of Internet resources: <http://www.sosig.ac.uk/desire/internet-detective.html>

Finding It Online: Web Search Strategies: <http://home.sprintmail.com/~debflanagan/main.html>

Internet Searching Tools: <http://www.sou.edu/library/searchtools>

Search Engine Watch: Provides tips and information about searching the Web: <http://www.searchenginewatch.com>

Search Engines, Directories, and Other Tools: <http://www.owu.edu/~librweb/scrdir.htm>

Resources for Finding Information on the Internet: <http://www.uky.edu/Subject/netics.html>

9. A teacher should be able to use a digital camera.

Scanners and Digital Cameras: An Overview by WIT2000 University of Chicago: <http://cuip.uchicago.edu/wit/2000/curriculum/homeroommodules/camera/index.htm>

Introduction to Digital Cameras: <http://library.thinkquest.org/50123/tutorials/capture.html>

ITMA Studio Tutorials: <http://www.itma.vt.edu/studio/tutorials.htm>

Digital Camera FAQ, by Jeff Keller: <http://www.dcresource.com/faq/faq.html>

The Digital Dimension by PowerShot.com: A comparison between traditional and digital cameras: <http://www.powershot.com/powershot2/why/digitalvsfilm.html>

10. A teacher should be able to use a scanner.

A Few Scanning Tips and Links, by scantips.com: <http://www.scantips.com/scanlink.html>

Selecting a Scanner, by the Digital Library Federation: <http://www.hudson.rlg.org/visguides/visguide2.html>

How to Buy a Scanner and not Make an Idiot of Yourself, by Al Giovetti: <http://www.charm.net/~wizards/computershow/news/scanners.htm>

Tutorial for Preservice Teachers – Introduction to Scanners: <http://library.thinkquest.org/50123/tutorials/scanners.html>

Tutorials for Preservice Teachers– Scanning Information: <http://library.thinkquest.org/50123/tutorials/scanning.html>

Flatbed and Film Scanning– A Users Guide, by Leland Stanford Junior University: <http://acomp.stanford.edu/acpubs/Docs/scanning>

Laura Turner is the Computer Technology Instructor for the College of Education at Black Hills State University. She has 15 years experience teaching computer technology both in the United States and in Germany. She can be reached at lauraturner@bhsu.edu.
