

Open Source and Freeware Educational Software for Educators

by © June Kaminski, RN MSN PhD(c) - 2007



Open Source Software

Most teachers have at least some experience with commercial educational software. However, in addition to commercially available software, there are a growing number of open source learning software being developed. Open source is a very unique movement begun by developers who wished to offer their creations to others “for the good of the community” and encouraged them to do the same. Users who modify or contribute to the evolution of the software are obligated to share their new code as well. This article presents several examples of open source learning software that can be used in authoring and creative classroom projects. For more suggestions, Sourceforge.net is an excellent resource for open source software.

Freeware Software

Another alternative to commercial software are the various freeware programs available. These differ from open source in that the author(s) retain the license and rights to the software, and may at some point choose to change to a more commercial venue to market the software. At times, software is offered as freeware (no cost) as the author is refining the product (alpha or beta state). Or, an independent emerging developer or even small company might choose to market their creation as freeware to help attract clients who will hopefully refer them to others. Freeware is a great directory for many types of freeware programs, as is Freeware Files. Tucows is another robust directory of both freeware (no cost) and shareware (minimal cost) software.

Authoring and Creative Software

Authoring and creative software can relate to a number of activities including web design, computer programming, e-content development, graphics, animation, or multimedia production and desk top publishing. There are several open source and freeware softwares that can help you and your students produce and create using computers at no cost.

Content copyright © 2007 by June Kaminski. All rights reserved.

This content was written by June Kaminski. If you wish to use this content in any manner, you need written permission.

- [LXLogo](#) is an open source interactive LOGO programming software especially made for K-12 students to learn the basics of LOGO commands and coding.
- [Ruby](#) is another open source programming software that is a combination of Perl, Smalltalk, Eiffel, Ada, and Lisp languages meant for older teens and adults.
- [Amaya](#) is an open source html and css web editor that also programs XHTML, MathML, and SVG code.
- [Nvu](#) is another html editor. Both of these software will work on Linux, Mac, or Windows platforms.
- [Coffee Cup VisualSite Designer](#) is a commercial web design product that can be requested for free for any US K-12 school.

Desktop Publishing (DTP) programs enable students to create and publish high quality printed documents such as magazines, newsletters, brochures, newspapers, and e-books.

- Open Source packages such as [Scribus](#) are available for no cost, and operate well on Linux, Mac/OSX, and Windows operating systems.
- [Campware](#) is also open source, and can be used to teach students how to publish newspapers or magazines on the web.

Graphics software provides children and youth with creative tools to promote visual and spatial learning, and to illustrate their learning in colorful and enjoyable learning activities.

- Open source programs such as [Tux Paint](#) (meant for children ages 3 to 12) provides early exposure to digital art making and easy access to the program both at home and school. Parents can download the software to their home computers as well.
- [DrawSWF](#) is also open source that allows children to draw pictures, then save them as animated flash files for the web.
- [The Gimp](#) is a more complex graphics program which is swiftly rivaling Adobe Photoshop in quality and versatility.
- [Paint Net](#) is another graphics program that works similar to Photoshop and is open source.
- Likewise, [Blender](#) has also developed into a robust program that allows students to engage in 3D graphics modeling, animation, rendering, post production, interactive creation and playback.
- As well, [Skencil](#) is a vector drawing program that can be used to learn to sketch objects and diagrams.

Audio and video open source programs can also be used to help your students learn to work with multimedia components.

- [CamStudios](#) is a great open source program that allows students to record audio and video files and convert them into streaming Flash movie (SWF) files for the web.

- [SqueakLand](#) is another open source media authoring software that was created for even young children to use.
- [Audacity](#) is an open source audio editor that let students record audio from a microphone, line input, etc. and export the recording as MP3s, WAV, AIFF or other files.