# Save Money With Freeware and Open Source Software

Teachers have always spent their own money on classroom supplies. With costs rising each year how can teachers add technology and software to the classroom without going broke? One answer is Freeware and/or Open Source software.

Freeware is computer software made available free of charge, but copyrighted by its developer, who retains the rights to control its distribution, modify it and sell it in the future. Users are sometimes encouraged to 'donate' to the software's creator, but donations are not mandatory. It is typically distributed without its source code, thus preventing modification by its users, whereas Open Source does provide access to the source code.

Technical differences aside, the bottom line is that both Freeware and Open Source offer educators the opportunity to bring technology into their classrooms without having to take out a personal loan. The following brief list provides some examples of software opportunities, but it is by no means comprehensive. To see much more that is available, try a Google search on a topic such as {freeware + "Grades K-2"} (without the brackets, of course); but be prepared to spend some time exploring the many, many possibilities that pop up.

## **Freeware for Grades K-2**

# Kea Coloring Book - Free Coloring Software

## (http://www.keasoftware.com/coloring/index.php)

The downloadable Kea Coloring Book is fun and easy to use. Kids 'of all ages' (teachers: don't be ashamed to try it!) will have fun mixing colors and coloring in the pictures, something this program allows with ease. The color mixing feature offers 20 ready to use colors and a palette to mix them. Also fun are the sound effects, from a gurgle to a splat to a slurp, that accompany each tool. Finally, the program allows a user to e-mail, print, and save coloring pages.

## Sebran's ABC - Free Software For Kids

## (http://www.wartoft.nu/software/)

"Sebran" means "Zebra" in Swedish, the language spoken by its developer and just one of the 30 languages in which this site is available. As the site explains, "It's never too early for your child to become familiar with letters and numbers. Sebran's ABC's colorful pictures, pleasant music, and gentle games teach letters, numbers, simple math, and rudiments of reading.

# **Freeware for Grades 3-4**

# **Seterra**

# (http://www.wartoft.nu/software/seterra/))

Designed by the same person who created Sebran, Seterra is a challenging geography program with over 70 different exercises. By using the outline map exercises, students may learn about countries, capitals, flags and cities in Africa, Europe, South America, North America, Asia and Australia. Seterra also can provide ancillary foreign language practices as the program runs in

Danish, Dutch, English, German, French, Italian, Spanish or Swedish. Each exercise has a high score list to keep track of progress.

## 2 + 2 Funny Math for Kids

# (http://www.funnymathforkids.com/)

This program aims to help children learn basic mathematical skills (counting, addition, subtraction, comparing numbers, multiplication and division) by providing a number of learning features. More than 20 activities will allow students to spend hours learning basic math concepts while being entertained by musical sounds and bright graphics. The site claims that, "it can be used for individual lessons as also at school. Interesting exercises, intuitive usage, beautiful music, attractive graphics and lovable narration make children return to learn mathematics with pleasure."

## **Freeware for Grades 5-6**

## Scratch-Programming Software

## (http://scratch.mit.edu/)

From M.I.T. and supported by grants from NSF, Intel, and many more, Scratch is a new programming language that lets users create interactive stories, games, music, and art. It not only helps users understand the logic of programming but can work wonders for collaborative activities. Besides showing examples of student-made modules, the site offers an excellent Teachers' page with many informative links.

## ArtRage 2.5 - Free Paint Simulation Software

## (http://www.ambientdesign.com/artrage.html)

Although ArtRage 2.5 Starter Edition is free, the Full Edition is available for only \$25, according to the website. The site claims that ArtRage 2.5 provides a realistic and fun simulation of using paint on a canvas, along with pens, pencils, crayons, water and other tools. Available for both Windows and Mac OS X, it comes with a fantastic manual, and there is a free downloadable quick start guide available from the Ambient Design Website. For those who don't like manuals, ArtRage 2.5 is easy to figure out, and you could be creating artwork right away without reading anything. ArtRage 2.5 is a terrific natural-media painting program at a price that's impossible to resist. Whether you're an accomplished artist or a dabbler, you'll find the program a wonderful way to unleash your inner-Monet.

## Freeware for Grades 7-12

## Paint.NET – a Free Photoshop Clone

## (http://www.getpaint.net)

This excellent free Photoshop-look-alike lets you edit and manipulate photos, or create digital art. According to the site: "It started development as an undergraduate college senior design project mentored by Microsoft, and is currently being maintained by some of the alumni that originally worked on it. (It was) originally intended as a free replacement for the Microsoft Paint software that comes with Windows (and) has been compared to other digital photo editing software packages such as Adobe® Photoshop®, Corel® Paint Shop Pro®, Microsoft Photo Editor, and The GIMP." Unfortunately it is available only for Windows-based machines.

GeoGebra - Geometry, Algebra And Calculus (http://www.geogebra.org) According to their website, "GeoGebra is a free and multi-platform dynamic mathematics software for schools that joins geometry, algebra and calculus. It received several international awards including the European and German educational software awards."

## **Freeware Teacher Tools**

## Wink Screen Capture (SnagIt Alternative)

(http://www.westerncc.ac.uk/news0006.html)

According to Great Britain's "Western Colleges Consortium" website: "Wink is a Tutorial and Presentation creation software, primarily aimed at creating tutorials on how to use software (like a tutor for MS-Word/Excel etc). Using Wink you can capture screenshots of your software, use images that you already have, type-in explanations for each step, create a navigation sequence complete with buttons, delays, titles etc and create a highly effective tutorial for your users."

## **FireFly-Web Browser**

## (http://www.luciboo.com/)

To quote the Website, "Firefly is a Web Browser made specifically for kids to make their surf experience safe." As such it offers these features, again quoting: "It always starts at luciboo.com; It can only go to websites linked from these pages AND pages approved by parents that are added to your favorites; It uses Google to perform searches, but presents results that are filtered of inappropriate content. Access to the Google results will require an adult password; It has a time-management facility so that parents can set the time the browser will work."

## **Open Source Software**

# **Open Source for Grades K-2**

# **Tux Paint**

## (http://www.tuxpaint.org/)

To quote the Website, "Tux Paint is a free, award-winning drawing program for children ages 3 to 12 (preschool and K-6). It combines an easy-to-use interface, fun sound effects, and an encouraging cartoon mascot who guides children as they use the program."

## **PotatoGuy**

(http://opensource.bureau-cornavin.com/ktuberling/)

According to its Website: "KTuberling is a 'potato editor' game intended for small children and adults who remain young at heart. The game has no winner; the only purpose is to make the funniest faces you can."

# **Open Source for Grades 3-5**

# TuxTyping

## (http://tuxtype.sourceforge.net/)

According to the brief Website 'blurb,' "Tux Typing is an educational typing tutor for children. It features several different types of gameplay, at a variety of difficulty levels."

# **CmapTools-Alternative to Inspiration**

## (http://cmap.ihmc.us/)

The brief blurb on the homepage states that, "CmapTools program empowers users to construct,

navigate, share and criticize knowledge models represented as concept maps." To better understand this, visit the homepage shown below, itself created with Cmap Tools, and also visit "The Theory Underlying Concept Maps and How to Construct them" (http://cmap.ihmc.us/Publications/ResearchPapers/TheoryCmaps/TheoryUnderl...)

## **Open Source for Grades 6-12**

## Tux Math Scrabble

## (http://sourceforge.net/projects/tuxmathscrabble/)

According to its Website, "TuxMathScrabble 3.0.4, a polished, multi-user application designed for either classroom or home use, challenges young people to construct compound equations and consider multiple abstract possibilities." There are four skill levels for practice, from basic addition and subtraction through multiplication and division. This software includes a data recorder interface for student performance assessment.

## Alice 2.0

## (http://www.alice.org/)

Developed by Carnegie Mellon University, the program advertises on its homepage that, "Alice is an innovative 3D programming environment that makes it easy to create an animation for telling a story, playing an interactive game, or a video to share on the web. Alice is a teaching tool for introductory computing. It uses 3D graphics and a drag-and-drop interface to facilitate a more engaging, less frustrating first programming experience." In other words – it makes programming enjoyable for all of us, whether or not we're natural-born programmers.

## **Open SourceTeacher Tools**

## Scribus (MS Publisher Alternative)

## (http://www.scribus.net/)

To quote from its homepage, "Scribus is an open-source program that brings award-winning professional page layout to Linux/Unix, MacOS X, OS/2 and Windows desktops with a combination of "press-ready" output and new approaches to page layout.

Underneath the modern and user friendly interface, Scribus supports professional publishing features, such as CMYK color, separations, ICC color management and versatile PDF creation." If you've priced a professional desktop-publishing program lately, you'll know what a bargain this is.

## Benefits of Freeware / Open Source Software on the Web

Today most freeware / Open Source Software is instantly downloadable, which means never having to wait for a package to arrive in the mail. The URLs may be passed along, as we've done here, for others to use free of charge. Many Web sites also offer links to teacher pages, to downloadable PDF files, and more. And, of course, nothing is better than free.

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