New Technology to Support Effective Teaching & Learning

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June 6, 2007

COLLABORATION TOOLS


Description: WordPress is the largest, self-hosting blog tool in the world. An open source tool, WordPress is a blog publishing system written in PHP and backed by a MySQL database. Through the use of a mix of static pages, blog posts, plugins and themes WordPress is often extended to provide more than is usually expected from a blog. Compared to more featureful content management systems, WordPress is easy to install and setup and free plugins and themes are available for most of the features users expect. WordPress is designed to be installed on your own web server, or shared hosting account, which gives you complete control over the weblog. Unlike third-party hosted services, you can be sure of being able to access and modify everything related to your weblog. This also means that you can install WordPress on your desktop or home computer, or even on an Intranet.

Luanne’s Review: Recently, several Cal Poly faculty members have been asking for a blogging tool that they can use in their courses. In March 2007, Patrick Kammermeyer installed WordPress on one of our Macintosh servers in the CTL area. Patrick and I have been experimenting with this blogging software for the past few months. We have found it to be very customizable, stable, and easy to use. We have made accounts available to the participants of the CTL Technology Learning Community this quarter for experimentation purposes and hope to gather feedback from them about their experience. You may view the blog at: http://cp-itsctl03.cp-calpoly.edu/CTL_Sandbox/tech/

MediaWiki - http://www.mediawiki.org/wiki/MediaWiki

Description: MediaWiki is a web-based wiki software application used by all projects of the Wikimedia Foundation. Originally developed to serve the needs of the free content Wikipedia encyclopedia, today it has also been deployed by companies as an internal knowledge management solution, and as a content management system. Notably, Novell uses it to operate several of its high traffic websites, which are not editable by the general public. MediaWiki is free server-based software which is licensed under the GNU General Public License (GPL). It’s designed to be run on a large server farm for a website that gets millions of hits per day. MediaWiki is an extremely powerful, scaleable software and a feature-rich wiki implementation, that uses PHP to process and display data stored in its MySQL database.

Pages use MediaWiki’s wikitext format, so that users without knowledge of XHTML or CSS can edit them easily. When a user submits an edit to a page, MediaWiki writes it to the database, but without deleting the previous versions of the page, thus allowing easy reverts in case of vandalism or spamming. MediaWiki can manage image and multimedia files, too, which are stored in the file system.

Luanne’s Review: There have been even more requests from Cal Poly faculty for WIKIs. WIKIs are springing up in departments all over campus but it would be better if the campus would decide on one WIKI to support. In March 2007, for experimentation purposes, Patrick Kammermeyer also installed MediaWiki on one of our Mac servers. We have found it easy to use but we haven’t made it available to anyone else in order to put it through its paces.
Mahara ePortfolio Software - [http://eduforge.org/projects/mahara](http://eduforge.org/projects/mahara)

**Description:** Established in 2006, Mahara is the result of a collaborative venture funded by New Zealand's Tertiary Education Commission's e-learning Collaborative Development Fund (eCDF). Released in Feb 2007 Mahara is a fully featured electronic portfolio, weblog, resume builder and social networking system, connecting users and creating online communities. Mahara is designed to provide users with the tools to demonstrate their learning, skills and development over time to selected audiences. Meaning ‘think' or ‘thought' in Te Reo Maori, the name reflects the project's dedication to creating a user-centred life-long learning and development application as well as the belief that technology solutions cannot be developed outside the considerations of pedagogy and policy.

Mahara is provided freely as Open Source software (under the GNU General Public License). In brief, this means that you are allowed to copy, use and modify Mahara provided you agree to; provide the source code to others; not modify or remove the original license and copyrights, and apply this same license to any derivative work.

**Luanne's Review:** I have been keeping an eye on this software as a possible open source solution for eportfolios at Cal Poly. CSU Humboldt State University is sending one of their instructional technology staff members to visit New Zealand this summer to learn more about this tool. Supposedly, Mahara is hoping to easily integrate with both Moodle and Blackboard.


**Description:** Second Life (abbreviated as SL) is an Internet-based virtual world developed by Linden Lab. As a downloadable client program, SL enables its users, called "Residents", to interact with each other through motional avatars, providing an advanced level of a social network service combined with general aspects of a metaverse. Residents can explore, meet other Residents, socialize, participate in individual and group activities, create and trade items (virtual property) and services from one another.

**Luanne's Review:** The New Media Consortium has been experimenting with this tool for the last couple of years and I have been keeping track of its development through their newsletter. At this time Second Life is not accessible, which precludes it being used on our campus. San Jose State opened up their own second life community this month. See: [http://chronicle.com/wiredcampus/index.php?id=2064](http://chronicle.com/wiredcampus/index.php?id=2064)

Google MyMaps - [http://maps.google.com/maps](http://maps.google.com/maps)

**Description:** Last month Google launched MyMaps. It provides users with the ability to create and share maps directly from Google's site. Users can mark locations on a map from a library of icons, draw lines and shapes to highlight paths and areas, and add text, HTML, photos, or YouTube/Google videos. When finished, map creators can list their maps as public or private. Public maps will be available in Google's local search index within two to six weeks. Local search results will also now return KML files previously created for Google Earth. Maps created with the new feature will also be automatically saved as KML files and entered into Google Earth's KML search index.

**Luanne's Review:** Walt Bremer and I conducted a Teaching Well with Technology workshop this month focusing on this tool. Faculty may find it useful for mapping out field trips and specific student projects where data should be shared. The ability to add text, HTML, photos, and videos could be very powerful.
Bfree – Blackboard Course Content Extractor - [http://its.unc.edu/tl/tli/bFree/](http://its.unc.edu/tl/tli/bFree/)

**Description:** Created by the University of North Carolina at Chapel Hill, Bfree is a tool for viewing, searching, and extracting Blackboard course content. A desktop application tested in both Windows XP and Mac OS X, Bfree operates on Blackboard Archive and Export .zip files, which are usually indecipherable outside of Blackboard. This extraction tool extracts the content and presents it as an outline that reflects the actual organization of the course. The advantages of this tool are clear as it can be used to: 1) Export Blackboard course content into a stand-alone web site; 2) Create backups of a Blackboard site to review outside of Blackboard; 3) To share the materials on a Blackboard course site with others who do not have access to Blackboard; 4) To easily browse and search materials that were posted on a Blackboard course site; 5) To export image, PDF, and MS Office files from a Blackboard site; 6) To take information that you entered directly into Blackboard as text and export it as individual files.

**Luanne’s Review:** I have tried out BFree and found it to be very easy to download and use. I experimented with the tool on a couple of Blackboard courses and here are the things I discovered: 1) The user interface was very easy to use and quite intuitive. There is documentation included but I didn't have to read it to run the tool and know what to do; it was fairly obvious. 2) You have two options, to extract content into files and folders or as a web site. The web site extraction worked best. There were a few quirky things (like it doesn't embed jpgs and gifs into the page they were previously on but generates a new page with just the image there). However, overall the extraction to a web site is much better than trying to build a course from scratch on the web. If you extract content to files and folders, any text you had that was description in Blackboard is extracted within the code (of course, this makes sense since it would have been HTML in Bb from the beginning anyway). 3) Supposedly, it let's you also extract other Blackboard tools such as the discussion boards, virtual classroom archives, digital dropbox, etc. but that type of extraction didn't actually appear to work. Maybe it's still a work in progress?

There could be some possible liability issues with this tool. For example, a faculty member might take a course with some illegal content (e.g., either copyright infringement material that was relatively "safe" in a Blackboard course because of the authorization needed to enter it OR content that is not ADA compliant such as uncaptioned video, etc.) and then they might post it on a regular web site (possibly even in their web space at Cal Poly and then this action might cause some liability issues for the university.

Overall, I can see some value in this tool. For example, currently faculty can Archive or Export their Blackboard course but when they do it is zipped and placed in a format that when opened just looks like hieroglyphics unless it is re-imported into Blackboard specifically by the Blackboard administrator. This Bfree extractor would allow faculty to export or archive their Blackboard content from their courses and then when needed, they would have immediate access to its content without contacting their Blackboard administrator.

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E Instruction CPS Clickers are devices to enable polling in the classroom to gauge students’ comprehension in class lectures. Using a radio frequency keypad, it avoids the problems of previous infrared technology, which required that a student be almost perfectly lined up with the infrared device to have their input captured. This tool integrates seamlessly with PowerPoint, allowing instructors to poll questions from PowerPoint slides and to see the results immediately within a slide. Simple to hook up, the instructor only needs a laptop with a USB connection. As of January 2007, E Instruction also offers a Macintosh version of this tool that is universal binary version to work on both Intel and PowerPC Macintosh computers. The device cost is low (about $20 with a required yearly signup fee of around $10 per student).

**Luanne’s Review:** Last academic year I attended the MDS vendor demonstrations of various companies pushing clicker technology. This company was clearly the winner according to surveys taken of
attendees. This academic year I also attended a private demonstration by the vendor with Stephen Hughes and I in attendance in Brian Tietje’s absence (who had requested the demo). Again, I was impressed that this is the best clicker on the market. Supposedly they are working to have the clicker integrate with Blackboard and since our meeting, they have listened to our suggestions and have taken steps to provide an accessible clicker for those with ADA needs. Many instructors are very eager to use this technology. It would be great if the campus were to make CPS the standard clicker used at Cal Poly so that students wouldn’t have to buy several different types of clickers for different courses and technical support could be focused upon just one clicker type.

WINDOWS SOFTWARE

CommonLook Section 508 for Adobe Acrobat -
http://www.commonlook.com/products/cl_s508_adobe.aspx

Description:
CommonLook Section 508 Plug-In is the optimal solution for Federal and state agencies, corporations and non-governmental organizations that want to ensure their Portable Document Format (PDF) holdings are accessible and meet the requirements of Section 508 of the Rehabilitation Act. CommonLook helps correct the most common accessibility problems, including the proper tagging of images, tables, forms and other non-textual objects. A compliance report makes it possible, for PDF authors, to get detailed information on the accessibility problems so they can be corrected.

Luanne’s Review: I attended a vendor web meeting of this tool a few weeks ago. The audience was a core of people from the CSU. Many of the participants expressed dismay that there is not a Macintosh version of this tool available. The vendor said they would look into the possibilities of offering it for the Macintosh platform as well. This software is a bit pricey at $1099.00 per license but could be helpful for those needing to insure ADA compliance of PDFs, especially the more difficult transformation of complicated formats such as tables or forms. This software does appear to have a bit of a learning curve so it’s not a solution for non-IT people; one still has to have an understanding of the Section 508 rules, etc.


Description: Picasa 2 allows you to take control of your digital photos. Similar to Apple’s iPhoto tool that Mac users enjoy for ease of photo management and editing, Picasa 2 is a FREE software package for Windows users from Google.Picasa lets you manage your photo library, edit your pictures, and share them with others. In almost no time you can learn how to organize, sort, rate, and locate specific pictures as well as how to rotate images, remove redeye, adjust exposure settings, and add special effects to photos. You can also share your photos via email, the Web, over a network, and even by ordering prints and books online.

Luanne’s Review: I taught this software in a Windows workshop this quarter. Participants were thrilled with what this software allowed them to do with their digital photos. Some of the people in the class manage university web sites and were excited about the time this tool would save them. Faculty were excited about the easy way it lets you place photos on the web with HTML and thumbnails.
MACINTOSH SOFTWARE

Parallels Desktop for Mac - http://www.parallels.com/

Description: Parallels Desktop for the Mac gives you the flexibility of running Windows on an Intel Mac simultaneously without rebooting. The new Coherence feature allows you to run Windows applications directly from your Mac desktop. Support has been added for USB 2.0 peripherals.

Luanne’s Review: I can’t say enough good things about this software! It is far and away the best virtual machine that has been made for the Mac. It is fast (unlike Virtual PC) and a pleasure to use. So far I have not had any issues with running any Windows software on it. I was even able to install drivers for my built-in iSight camera and got that to work on my PC side for a video conferencing demo I demonstrated to faculty.

Procast - http://www.profcast.com

Description: ProfCast is a Macintosh tool for recording presentations, including PowerPoint and/or Keynote slides, to transform them into enhanced podcasts. ProfCast provides a low cost solution for recording and distributing lectures, special events, and presentations as podcasts. You can then publish your complete presentation on the Web as a PodCast, complete with RSS support. You can also export your final product to GarageBand for more editing.

Luanne’s Review: We purchased Profcast this year and found it to be quite easy to use. It certainly speeds up the process for enhanced podcasting. It is available for interested instructors to use on one of the student computers housed in the CTL. However, the price is cheap for individual use – educational pricing is $29.95!

SubEthaEdit - http://www.codingmonkeys.de/subethaedit/

Description: SubEthaEdit is a Macintosh tool that allows people to edit the same document, live and in real time. SubEthaEdit is a collaborative text editor that combines the simplicity of TextEdit with the power of Bonjour. It allows one to share documents on a local network (with Bonjour) or on the Internet. Every participating user can type simultaneously and see what others are typing. You can even follow other users to see what they are up to. SubEthaEdit features true simultaneous editing for multiple users. Text changes are highlighted in a different color for each user, allowing easy identification of your coeditors’ changes. The scrollbar indicators give you a quick overview where others are working in the document. In addition to its rich networking capabilities, SubEthaEdit does everything you’d expect from an advanced text editor.

Luanne’s Review: Walt Bremer and I have experimented with this tool for collaborative documents constructed for our Teaching Well workshop. It is very slick and works great! This is definitely a beneficial tool for Mac users who wish to collaborate on a document without worrying about setting up a WIKI on a server or waiting to collaborate in a slow method such as using Microsoft Word’s Track Changes features through email exchange.


Description: Automator is an application included within Mac OS X (Tiger & Leopard) that implements point-and-click (or drag-and-drop) creation of workflows for automating repetitive tasks. Automator enables the repetition of tasks across a wide variety of programs, including the Finder, Safari, iTunes, iPhoto, Mail, Preview, TextEdit and others. It can also work with third-party applications such as Microsoft Office or Adobe Photoshop. Accomplish all of your time-consuming, repetitive manual tasks quickly,
efficiently and effortlessly with Automator Workflows. It's simple to create custom Workflows just by dragging items, pointing and clicking. Perform the task once using your Automator Workflow or many times — even share your Workflows with others. For example, you can rename a group of image files so they all share the same base name but are numbered sequentially (ProductShot001.jpg, ProductShot002.jpg, etc.) in seconds. Once they’re renamed, Automator can automatically scale every image to a designated size, and then attach it to a new email message and send the message. After you create a Workflow, you execute it by clicking the Run button in the Workflow document window. Automator performs each step in the Workflow in order for you until your work is done. If that isn’t enough great news, here’s even more: Developers are extending the reach of Automator by creating new Actions for their applications and you can expand your library by downloading new Actions from third-party developers. Come and learn how to effectively use this easy answer to more difficult Apple scripting!

**Luanne’s Review:** I taught Automator in two faculty/staff workshops this year. Class participants were thrilled at the things they could do easily with Automator, which would have required a lot of time with tedious Apple scripting. There are all kinds of great action scripts that have been developed for a lot of the Macintosh software utilities (Photoshop, Apple Remote Desktop, etc.) that take advantage of this tool and save hours of time. The trick I like is using it with Apple script to send actions via email with rules that you set up within Mac Mail.

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**WINDOWS & MACINTOSH VIDEO OR AUDIO SOFTWARE**


**Description:** Cinematize 2 offers everything you need to start extracting audio and video clips off of DVDs. Extracted clips are ready for use in popular applications including QuickTime, Windows Movie Maker, Premiere, Final Cut, iMovie, PowerPoint, iTunes, even an iPod.

**Luanne’s Review:** I suggest this tool to faculty who want to extract DVD snippets for classroom use. The TEACH ACT allows for faculty to use up to 10% of a copyrighted movie file, so if faculty follow those guidelines, they are abiding by copyright law. I suggested this tool to Bud Evans in Political Science, who bought it and now swears by it. He says it's “the best tool in his software arsenal.”

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**Description:** Amazing Slowdowner is a tool that takes audio and/or video files and slows them down between 1% and 400% using a “time-stretching” method, which does not change the pitch, regardless of the speed. Other features include increasing the audio speed up to twice the normal rate, setting loops, pitch adjustments in semi-tones at full or lower speed, and keyboard shortcuts.

**Luanne’s Review:** Although I initially bought this tool with my own money for personal use for taking dictation of music files that I wished to transcribe as a musician, I found this utility to be very effective for creating transcriptions for video captions. The tool allows you to slow down the speed of any video or audio file (up to 400%) without losing the pitch or articulation of the speaker. The looping mechanism is also convenient for listening to more difficult portions of a video and transcribing them into a MS Word document for later captioning with Magpie.
VIDEO DEMONSTRATION TOOLS


**Description:** SnapzPro X is a powerful, versatile, and easy to use screen capture solution for Mac OS X. Whether you're writing online manuals that require visual examples, or simply recording video of software demonstrations, SnapzPro X is the ultimate utility for capturing moving or still pictures on Mac OS X. Snapz Pro X captures full motion video of anything on your screen, complete with digital audio, and an optional microphone voiceover. Think of it as a digital video camera for your screen. SnapzPro X makes short work of making training videos, producing product demos, creating tutorials, archiving streaming video, and anything else you can think of.

**Luanne’s Review:** A very useful software tool that I have used countless times to create demonstration videos for faculty member’s courses or to train them. Also, this tool is excellent for extracting commercial video from DVDs. If you make sure to turn on the subtitles of a commercial movie while you record with SnapZPro, you don’t have to worry about captioning!


**Description:** Macromedia Captivate (formerly RoboDemo) automatically records all onscreen actions and instantly creates an interactive Flash simulation. This software enables anyone to rapidly create powerful and engaging simulations, software demonstrations, and scenario-based training without programming knowledge or multimedia skills.

**Luanne’s Review:** A great tool, which we have used to create over 55 training/demonstration videos for faculty and students for our Blackboard support site. Advantage over other tools such as Camtasia or SnapzPro: It allows for captioning of content right in the software. The new version, Captivate 2, even allows you to toggle captions on and off.


**Description:** iShowU allows you to capture and record anything you can see on your screen, along with audio from a compatible source (like a microphone) as well as any audio from the Mac itself.

**Luanne’s Review:** Similar to SnapZPro but new on the market. Advantages over SnapZ: You can pause the recording and you can set up the criteria ahead of time for the compression codec. However, it doesn’t appear to have as many compression choices as SnapZPro. However, this software is much cheaper - $20 vs. $69 for SnapzPro!

CAPTIONING SOFTWARE

Magpie - [http://ncam.wgbh.org/webaccess/magpie/](http://ncam.wgbh.org/webaccess/magpie/)

**Description:** MAGpie is a free application for creating captions and audio descriptions for rich media. This software tool is designed to make it easy for multimedia content developers to add captions to their audio and video content. MAGpie provides an environment for developers to listen to their content, add captions, and synchronize the captions to the content by adding a timecode for each event. MAGpie can then be used to export the captions to three multimedia formats: SAMI, RealText for Real Player, Apple’s QuickTime or SMIL (a display language used to display captions in both QuickTime and Real Player).
Luanne’s Review: We have found this tool to be the easiest for syncing transcripts with the video. Final product of Magpie is a text file with the proper time codes that can be merged with the video in QuickTime Pro for final output. There are both Mac and Windows versions of this tool but the Mac version crashes a lot. I taught our student assistants how to use the tool, which we implemented to complete all the captioning for approximately 12 videos in Brian Tietje’s hybrid BUS 346 course.

Macaw - http://www.whitanderson.com/macaw/

Description: Macaw is another free application (specifically for Mac) that helps create text tracks for captioning QuickTime video. The tool includes the ability to use some free QuickTime sprites, which can be added to QuickTime videos to let users toggle on and off the text track. There is also a sprite that lets you toggle English and Spanish captions on and off.

Luanne’s Review: Macaw is similar to Magpie, but doesn’t crash on a Mac like Magpie’s version does. The ability to have the toggle on and off sprite is a nice addition. We experimented with it on some of our captioning this year.


Description: Videocue provides a fully functional on-screen teleprompter to transform the Macintosh into a little video production studio capable of giving a speaker face and audio to your PowerPoint presentations, or making it very easy to assemble news clips and your own video for a video blog or podcast. Videocue lets you publish directly to multiple popular blogging systems (LiveJournal, Movable Type, Blogger, Typepad) and it makes much easier for non-technical users to bring together professionally-looking audio/video presentations that can be easily posted to an existing blog/site. Videocue allows you to publish your movie with a subtitle track overlaid on top of the video as a QuickTime text track that can easily be toggled on and off. Adding titles, photos, and other media to a presentation is quite easy since you can drag them to your storyboard and they'll appear when you speak the line of text they are next to.

Luanne’s Review: I initially bought this tool for ITS as another tool in our arsenal to assist in captioning video but in the long run, I have used it more for the on-screen teleprompter. Software teleprompters are quite expensive (generally around $1000) whereas this tool was cheap ($49). The teleprompter was a great asset when working on Brian Tietje’s Hybrid Marketing class (BUS 346) this year. We used it for around 12 videos where we needed to follow text scripts on a teleprompter word-for-word.

Casting Words Transcription Services - http://castingwords.com/

Description: Casting Words is an online transcription service for podcasts. The customer simply uploads an MP3 file to their server and receives a transcription turnaround in 3-5 days at the cost of $0.75 per minute. Expedited service in 24 hours is available at $2.50 per minute. All transcriptions are done by real people instead of machines and transcriptions are delivered in plain text, HTML, and RTF formats. You also receive an RSS feed of all your transcripts.

Luanne’s Review: So far this is the best podcasting transcription service I have found – both for accuracy and price.

**Description:** Podscope is a search engine that allows you to search for spoken words within any audio or video file. Enter a word or phrase in the input box, and it will show you a list of results. By clicking on the (+) sign next to each result, you can select snippets of audio to help you decide whether to listen to the whole podcast or even subscribe.

**Luanne’s Review:** Originally, I was working with Peter Mosinski at CSU Channel Islands in a Channel Islands pilot project testing this tool to see if there was any potential to use its audio processing algorithm capabilities to potentially automate speech-to-text conversions to ease the process of creating transcriptions for audio podcasts. It turned out not to be the answer in the long run. 😞

### DESKTOP VIDEO CONFERENCING SOFTWARE

I reviewed a multitude of software packages for desktop video conferencing as a part of a Teaching Well with Technology workshop. Here are the top two winners:

**SightSpeed (for Windows & Mac) - [http://www.sightspeed.com/](http://www.sightspeed.com/)**

**Description:** SightSpeed is a freeware videotelephony and instant messaging client for both Microsoft Windows and Apple Macintosh operating systems. The service allows people to make free video calls, free computer-to-computer voice calls, calls to regular telephones, and to send video mail over the internet. SightSpeed's standard service plan is free. The premium service plans costs $4.95 per month and is designed for power users or for commercial use who wish to have up to four participants in a video conference instead of just one-to-one conferencing.

**Luanne’s Review:** Far and away the best desktop video conference tool for Windows out there. iChat has some advantages over it (since iChat can allow video conferencing for up to 4 individuals at one time for free whereas SightSpeed makes you pay for that feature) but this tool is cross platform, which makes it especially attractive to Cal Poly. Although Skype is more popular by the masses right now, Skype actually hijacks some of your online connection processing power. It will especially hijack the more powerful networks. This is the reason many universities have banned Skype as a teaching and learning tool. SightSpeed does not use your networking power to carry out its tasks. The video blog tool is especially nice for sending a video comment in an email.


**Description:** iChat AV is built-in software for the Macintosh Tiger operating system. It allows for 10 audio participants at one time and four video participants using the Apple iSight camera. iChat also supports the new iChat Server, allowing a university to deploy and run their own private, secure IM server through SSL encryption. iChat Server works with the iChat client in Mac OS X Tiger as well as with popular open source clients available for Windows, Linux, even PDAs. iChat allows you to transmit any kind of file — a Word file or PDF, a web address, a photo — by simply dragging it into your chat window. Pictures display right in the message window, web links open with a click.

**Luanne’s Review:** Still the best desktop video conference tool for Macintosh users. Speed of video chat was much faster than SightSpeed. iChat will allow communication with Windows users if they have an AIM account. Using a Jabber transport, iChat users may also integrate their MSN and Yahoo! contacts into the Jabber pane. Tonia, Patrick, and I use iChat on a frequent basis to quickly send digital files back and forth since email is often slower in transmitting files than we are willing to wait upon during our busy workday.