Saturday, May 31. 2008

Open Source for Education

Moodle! Why this Open Source, Course Management System "Can't / Won't / Will Never" Catch On in K-12 Education Open Source advocates like to promote the Course Management System (CMS), Moodle!, as the antidote for Blackboard™ and WebCT™. These commercial products are "high-priced" and funding for them seems out of reach in a time when school funds are evaporating.Wouldn't it be wonderful if an Open Source product could do the job that Blackboard™ and WebCT™ do, without the high cost?Unfortunately, the Open Source Course Management System, Moodle! is not up to the task, at least for teachers in K-12 Education.SidebarMoodle! may be up to the task in higher-education where the dynamics of course preparation and delivery differ from K-12 Education.For example, a college or university professor may teach a "full time load" of 12 or 15 quarter or semester hours (15 hours is sometimes considered an "Overload"). And, with the rule of three hours of preparation time for each hour of face-to-face class instruction. This schedule results in a full, or overtime load.Public school teachers, on the other hand, spend about six hours a day in front of students, maybe 2.5 times the number of hours that a teacher of a college-level class per week. But, planning time for K-12 teachers is generally 45 minutes or (50 minutes in a generous schedule).So, the numbers look like…

This table shows that K-12 teachers spend about three times more time in class delivering face-to-face instruction, and K-12 teachers receive one-tenth the preparation time.

These data demonstrate the reason that a Course Management System for K-12 teachers must have a streamlined interface and be optimized for time-saving. A complicated interface and tedious course development and management process fail to meet the needs of K-12 teachers…and are not viable course management and instructional delivery solutions.What are the Problems?Moodle! does what it says it will do, i.e., manage online courses. So, what are the problems that affect ordinary teachers?The first problem stems from the "database backend-handcuffing" by the product.The backend database interface is slow and tedious. Instead of being able to use the File Transfer Protocol (FTP) system that would automate sending the course updates to the online server, each piece of instructional material (title, description, activity, image, graph, video link, etc) has to be copied and pasted into an online database form.This backend database "adding and updating" method prevents teachers from using cute and time-saving tools such as "global search and replace." The backend database "copy and paste" Moodle! method of course management also prevents the streamlined use of templates.Moodle! also lacks a checkout feature.Sidebar
A checkout feature means that when someone else is working on the course materials, you cannot work on that same component, too. This prevents one person on a development team from overwriting the work of another. This feature is vital for collaborative instructional design and team-teaching.
Another Moodle! shortcoming is a course update feature that depends on a crude "backup /restore" strategy. This is a "full database replacement" strategy that allows only for the restore of the entire course database. This means that you cannot update just a chapter, section or subsection of a course, but this means that you must backup the entire course when you want to update in this way.The only way to add section and subsection content in a Moodle! course is to "copy and paste" the new content (title, description, text, image, link, activity, etc.); one-by-one, bit-by bit into the online database.Or, teachers can work on a complete copy of the database, and replace the online course with a complete, new copy of the course. The problem with this strategy is that once data (such as student records, student contributions, student grades are backed up, the old records are copied over (over written) and no longer exist.Therefore, the course update process only works correctly before students start to use the online course. Desktop Development Environment and Development Servers Moodle! provides a "desktop development environment" that works with Microsoft™ Windows. This is useful for developing and prototyping a course.What this means is that teachers must have a complete working database on their desktop, and they must copy the entire database to the server. But team teachers cannot have more than one copy of the full database on their desktop computer unless they are able to share that desktop somehow.SidebarCaution: Do not attempt to share the Moodle! Development Environment (MDE) on a school district network. The MDE lacks any of the basic security features that members of your school district's IT Department staff demand.What this means is that teacher teams cannot develop courses that fit together. The method for more than one teacher to work together is to use the live, online database.Fortunately, Moodle! has a way of allowing courses that are in the development stage to be hidden from the view of students.SidebarWhat teachers have to do if more than one person is working on a course is to assign (delegate, deputize, shaft) one person on the team with the job of entering everyone's course contributions. Of course this requires double work for one person.And, as our graph shows, teachers do not have time for double work. What Moodle! needs is the ability for multiple members of a teaching team to update courses in a modular way, rather than its current "all or nothing" database strategy.Multiple Workstations - Multiple Team Teacher: Moodle! CatastropheThe lack of a modular course management structure creates another course

management nightmare for Moodle!Unfortunately, teachers must use computers at work and at home, and keeping a database synchronized is next to impossible. The only solution to this issue seems to be to develop Moodle! in separate courses on a development server, then copy the separate courses to the production server once the course is completed.The alternative, if each teaching team member develops course with the individual desktop development environment, is to "copy and paste" each individual component and send those components to one of the team members…the one that will copy and paste the individual components to the active server. This strategy represent "triple work for one team member…and will never get done!"

But, in these days of "test-stress-driven" curriculum objectives and minimum preparation time, teachers barely have time for their first level of work, i.e., face-to-face instruction of students; let alone course development work in triplicate. Consequently, "gung-ho techie teachers" are the only folks who might to manage a K-12 Moodle! course after the first, time-intensive week."Mulish" Lack of FlexibilityTeachers must be able to save and reuse course components and templates when developing courses. Flexibility to "mix and match" course components, and flexibility to share components across-courses must be available. But, these are missing in "mulish Moodle!".The requirement of "backup and restore" of the entire database hampers efficient development. Just keeping database copies in synchronization is next to impossible by a single person, let alone multiple teachers.Of course, with college classes where the professor prepares the entire course syllabus in advance (Remember Higher-Ed folks have ten times more planning and course development time as K-12 teachers), Moodle! functions quite effectively.But, college courses are packaged into neat quarter or semester packages with a limited number of class meetings.Compare sixteen sessions in a Tuesday-Thursday semester course with the 90 sessions that K-12 teachers meet with their classes per semester. Adventurous (or masochistic) teachers must break courses into "units." But even so, these units will be "supplemental materials, not core course components.Desktop Development Security: A System that can't Connect to the Internet can't Develop an Online CourseAs mentioned, Moodle! provides a local desktop development platform. Unfortunately, this development environment lacks basic network security, and cannot be used on a network such as the kind of network that school districts employ.Teachers cannot connect a computer with this MDE installed to the Internet from home, either, especially with an "always on" broadband connection (DSL or Cable).Besides the local Windows™ Desktop Development System (that most teachers require), creates that same dual database issue. What happens when the teacher wants to work on the desktop at school as well as at home is "confusion."Needed Usability FeaturesWhat Moodle! needs is a front end interface similar to the "Dreamweaver™/ Contribute™ system, with version control and checkout components. Updates to courses should be "one-button, FTP-enabled."And, Module! course development needs to be both "cut and paste" and "drag and drop."

The software needs to work with templates and modules, both used as "course building blocks." Building every course from scratch is an effort in futility that few teachers have time for.Instructional InadequaciesInstructional planning and course design can be streamlined by using templates, modular elements and reusable forms. Moodle! needs to create this flexibility.Copying entire courses using a "backup and restore" function is equivalent to repeating every minute (starting again from the beginning) of class instruction each time the class meets.

Besides, several teachers, building components of a course would still need to delegate one person to copy (integrate) their contributed components into the final version. Double or triple work that every teacher abhors.Practical, Logistical IssuesThere were other practical and logistical issues associated with deploying a Moodle! course:

For example a Fourth Grade teacher with 22 students, teaching seven classes a day...Reading
English and Spelling
Math
Science
Social Studies
Health

…would require an inordinate amount of course development time.But, Moodle! course development is too time-intensive for teachers to manage for so many classes.Besides that, every student must have complete access to a computer for every class. Otherwise, only a select few students could use the course at one time. And, only a few students being able to profit from the extended time that the course development takes makes course development impractical.SidebarTeachers can only afford to automate instructional components when these multiply the effect of their work.Any process that gouges into teachers' limited planning time cannot be justified because such methods squander time, a teacher's most precious resource.So what about students accessing the materials at home for review?

Posted by Classroom Toolkit Newsletter in Open Source at 01:00

Wednesday, April 30. 2008

Open Source for Education

Literary Machine: What can Open Source learn from a Failed Commercial Program?
The literary Machine™ advertises itself as a tool for:
anyone who writes, anyone who must think critically and creatively, anyone who composes and produces documents, anyone who sorts and analyzes information…Source:http://www.sommestad.com/lm.htmThe Literary Machine™ developers believe that…Teachers and Students
Scientists and Researchers
Lawyers
Writers and Novelists
Business Executives and Personnel Manager
Just about any Thinker…needs their software.
Well, maybe they do, or maybe they don't.
So, why don't teachers everywhere refer this program to their district's IT department for testing? Why don't teachers test this program themselves?
Answer: This program is not ready for prime time. And, Open Source advocates need to take a look at the lessons that this program teaches about the "fitness of software for the educational arena."First, the Reviews!First impressions of the software are damaged because the Literary Machine™ Website uses arcane and obsolete frames. Besides the Website contains broken links. Worse, the software sales site does not even have its own domain name. And anyone can get a domain name for less than $10.00 USD.SidebarIf you want to know just how easy and inexpensive it is to acquire a domain name, check out Go-Daddy.Com Domain Names…
"LiteraryMachine.com is already taken, but LiteraryMachine.Info is available for only $0.99 USD for the first year.Not having a Website to look professional is an unconscionable business faux pas.
And having a sloppy Website is inexcusable, particularly when you can automatically install an Open Source Web site without cost at any Web host. For example:
Go-dadd.Com and HostGator.Com offer Website hosting for under $4.00 per month (Go-daddy) and under $8.00 per month (HostGator)

And Both of these hosting sites offer free Open Source Web Software and "one-click" installation.This means that their is no excuse for offering a sub-standard presence like Literary Machine does.But, here are reviewer comments:
"Difficult to say whether LM is worthwhile - Difficult is the word""The website this comes from gave me a trojan. Download3, or something, OR perhaps it was that I just downloaded this? I'm blaming the website. Still, I don't trust it now. ""Pros: Couldn't figure out how to even begin using this program. Since trying out menu selections doesn't really provide any enlightenment and it didn't play nice hooking with Internet Explorer when trying to go to view the tutorials, I still have no clue how to use it. I guess all this should have been in the cons section.
Cons: I hate to rip on a free program, but this sure looked like it was quite the effort so I hope my criticism is constructive - it is meant to be. There has to be some set of relatively easy to find programming standards that tell what a user expects when selecting a text box menu item, etc. so if the programmer(s) can make it more consistent and intuitive to the average user, its supposed power and value might come shining through. Until that happens, I suspect most will try and give up on this program as I have."Difficult to use. Application needed is hard to uninstall..."I am reasonably computer literate but I found this program impossible to figure out. I played with it for over an hour and finally decided that I could not fine any use for it at all. While I hate to knock freeware I suggest that you save your time on this one and don't download. ""During installation, the program requires you to install an application called Borland Database Engine. This application is not the greatest because it 'difficult' to remove. I managed to remove it thank to this site: "worldwideweb.stsi.com/lurk20005.htm". Unless you must; it would be best to pass on this program... (Unless you don't mind 'things' being installed on your computer!)""Non-intuitive software makes work a nightmare""Pros: Well, it would have been free, if I could've gotten it to work.Cons: I am very much disappointed with the handling of this product. While it promises much (and may even deliver at some point), it's next to impossible to figure out how the thing even works. While it?s far from intuitive, I had hope in the mention of tutorials, but even these were not well handled.The very first link returned a 404 error (page does not exist). Not an auspicious beginning.In the help file is a link for an 'introductory animated tutorial.' This loads a browser window showing 'Error loading viewlet' and a pretty blank screen.When I finally found a link that worked, I was greeted with the message that this version is no longer supported, and that the tutorial and help pages had been taken offline. However, tutorials are still promised, in the form of Flash and PDF file downloads, at a cost of $8 or $20 (At this point I'm no longer interested in finding out what the difference is.)I have it open on my desktop, to check facts as I type, but as soon as I post this review, the Literary Machine is coming OFF of my machine."

Source:Download.ComLike other reviewers, Classroom Toolkit regrets publishing negative reviews. But, our purpose in reviewing the Literary Machine is to show exactly what issues affect Open Source software when teachers or students (or both) ask the district's IT Department to load the "free software.""No Free Lunch:" Corollary - Nothing is "Free!"Take notice of every one of the issues presented by the Literary Machine reviewers… Incompatibility
Non-standard installation
Uninstall difficulty
Support
Inadequate tutorials
Obscure database engine
Etc.Notice that price is not on the list of issues. But, wasting time with a "free program" is on the list.
But, look at what the Literary Machine developers provide as "fixes and problem solving solutions for installing the "free"software…
Note: Classroom Toolkit was not able to provide a direct link to this information because of the "frames" design of the Literary Machine Website. We have included a link that allows you to skip over these error messages. Select this link to skip this section of the review...
"Errors and FixesImportant Notice: Windows XP with Servicepack 2Some older LM2000 and LM Professional installer programs will not function on Windows XP machines with Servicepack 2 installed. Replacements exist since Dec 2004. Link to the Win XP SP2-adapted package:Win XP SP2 LM2000 installation file for Windows XP Servicepack 2----------This page has three parts.At the top you'll find an opening summary of the most important information. We recommend that all users read it, especially if you do not have the latest version of LM 2000. The second part is a detailed account of all the important fixes made since the initial release of LM 2000 version 1.0 (1.051) on 22 October 2000. The latest version of the text document this section comes from is available at http://www.sommestad.com/dnl/LM_Program_Fixes.txt. It closes with a summary of LM's limits (e.g., size limits of items, projects, and so forth).----------Summary"Portable folder installations": The problem: If you have another BDE program running, the "portable folder" LM installation will report "Borland Database Engine (BDE) not found". Solution: Execute the file uninstall_local_BDE.bat to remove the BDE files in the LM program folder . (A requirement is that you already have a BDE installation (notified in the Windows Registry) in the machine.)Outlines: Double clicking a line (project) in an outline saves the outline and opens a new outline build with the clicked project as name. This is a potent command, but it might be executed by mistake. Reload the previous outline if needed. (This function has been made optional in LM Pro).Important installation issue: The Paradox database system (version 5) will not allow filenames with path included to be longer than 79 characters. Example: D:\Program Files\Sommestad\The Literary Machine 2000\project.db If you install somewhere else than in the suggested D:\Program Files\Sommestad\, keep it short. Warning message in version 1.128B and upwards.Merge Words: Merge Words in the Concept Window will only function for a pair of words, not for three or more.Windows 95 problems with late 1.1 versions: Windows 95 installations may have general resource problems with version 1.1, probably due to the increased complexity in the program. In the final 1.1 version it will be possible to set the maximum number of text items on screen to 30 - 200. The lower limit could be necessary for Windows-95.Return from external sessions, like editing files, sometimes requires a click on taskbar.DOS-jobs (backup and restore) must be manually deleted from taskbar (Windows 95/98).DOS jobs time-scheduled and may take a long time to complete. Workaround: Let the timeout message stay on screen until you can see that all work in the command window is done.Desktop map repaints with delay only. (Intentional to save resources, pls click update.)WordPerfect will not work as standard word processor (as helper text editor) within LM. Two things can cause problems with invoking other programs from LM: Long file names. May cause troubles with system modules that have been migrated to the system from 16-bit systems. This is solved here (like in other systems) with the "8.3" short filename convention. (= Short names with " ~ " in them).
The application will not conform to the scheme: Run: EXEAPPNAME filename. That is, it will not take upstart file name as 1st parameter on the command line. This is the WordPerfect case. WP starts a dialogue which disturbs LM. (This is a "shell"-type and not an OLE-connection).Tips: To find out if a word processor will work within LM, do this test: Make a shortcut to the word processor exe file. Drag and drop a text file on it (Like ReadMe.txt). If it works, and works without any upcoming "Do you really want to.." dialog box, LM will take it. Copy the path and filename from "Properties" of the shortcut and insert into the LM.ini file. Example:TextEditor = C:\Program Files\Microsoft Office\Office\WINWORD.EXEAdvanced auto start options with LM (auto start in minimized position) or (accidentally) double-clicking the start icon one extra time may case errors (like "referenced memory at...") Escape via "Cancel" or "Ok" and start again.
Reinstalling (or version refresh of) Corel products (WordPerfect) may require reinstall of LM. (1 reported case).The PdxRbld freeware for packing tables may require a BDE-version setting in the ini-file. See PdxRbld documentation in Readme.rtfThe sub-application "Wordboiler" displays its window in the "always on top manner". However, this may be disturbed if other applications also use "on-top". If the Wordboiler disappears, look for it behind the LM main window. (You can place it alongside the main application window.)Help file generally not accepted by users. Minor revision with version 1.112 lm.exe package and with 1.117 (Separate download file). See Release notes for any extra info needed.Repaint of text item corners (color) may temporarily fail.XML-import comparatively slow.No pack of database within system. (See "Database maintenance" page).URL capture insufficient as to length and unusual characters

used.Bugs in project handling and start-up of documents/web-pages were corrected in version 1.118D.Character set adaptations (See "Adapt to other language" page).Paradox database system (BDEADMIN.exe) must not be configured for multi-user access. If you get growing *.lck files somewhere on your disks during execution run the BDEADMIN.exe database setup program and set LOCAL SHARE to false. (Select Configuration/System/Init).The warning for .lck files and the suggestion to set LOCAL SHARE = FALSE in BDEADMIN.exe may reappear too often. Fixed in 1.121B. SHAREMODEWARNING=0 suppresses the warning. (However, it is not to recommended to allow LOCAL Share = TRUE)The "Large Font" setting in Windows is not recommended - some dialog windows become distorted.There are irregularities in the automatic saving of "excluded words" in the Wordboiler. Users should manually load and save "exclude words" if they are used.----------Program Fixes (Details)GUNNAR SOMMESTADTHE LITERARY MACHINEDec 14, 2001----------IMPORTANT FIXES in versions later than 1.051 (= Oct 22, 2000)----------Unhooking a project from a new item can remove a keyword also: FIXED (1.129)Find command: (FIXED 1.127)When using a search string with a blank (=several words), the command misses some occurrences. The search is performed on one line at a time in the text window - missing those items where the two words were split on two lines.1) URL:s stored in the project "box" may fail if they contain arguments separated by commas or other unusual constructs. FIX: Comma separation case fixed; else the problem remains. Length = 80 chars; will not be changed, since it is defined in the database. Same applies to title length (38 chars)2) FIXED: Book Width in .ini-file not in effect.3) FIXED: Project box; "Execute on file extension" could fail if the filename contains blanks.4) Behavior of "flyword" dropped on item changed: No longer supports direct keyword update. WORKAROUND: Drop Flyword in dictionary, then drop the selected word directly onto the item.5) FlyWord by DoubleClick option in .ini-file not ok. FIXED. 6) FIXED: New items did not have correct "text side-up" mode set; the new right button menu on single words would not function.7) Insert new word with testing; must find both Dict and Inflec entries. FIXED. Menu selection Edit/Copy (to get word in table); apply also to inflection window. FIXED.9) Concatenation of very long texts unchecked in memory. FIXED, concatenated texts limited to 250 000 characters.10) Minor memory leakage (connected to big clipboard copies). FIXED.11) Inflection" data that was saved to a zip-file was not included in a subsequent restore operation. FIXED. [1.113E]12) The Paradox database system (version 5) will not allow filenames with path included to be longer than 79 characters. Example: D:\Program Files\Sommestad\The Literary Machine 2000\project.db If you install somewhere else than in the suggested D:\Program Files\Sommestad\, keep it short. Warning message inserted in version 1.128EDATABASE - comments and hints:a) Utility menu: See new entry "Find damaged items"b) Compress the data base: Use a freeware like Roman Krejcis program Pdxrbld: http://www.betbyte.com/PDX.HTM (Information in help file about rebuild on restore not correct.)c) Change character set: The instructions found in Online Help/Help Center still applies. Complicated, but reported to work (Hungary, Norway, etc)KNOWN PROBLEMS:- Outline subsystem: (1) When deleting a project, the corresponding tree node in an outline tree showing will not disappear automatically. Workaround: Save this outline and reload it.(2)When using the Unhook command to delete a tree node, this node will be placed at bottom. However, if the node is a branch in the tree, the subnodes will not show up .Workaround: Save this outline and reload it.2) fixed in 1.127.- Windows-95 installations will often get problems with resources. Probably the 1.1 version of the program has grown too big for Windows-95. A setting in the INI file can help: Set MachineIndex = 50 for small Windows-95 machines and set it high (max 200) for modern machines. (Equals maximum number of items on screen.) The program has been modified in ways that often will make it exit very quick on serious problems, in order to prevent damage.- Return from external sessions, like editing the ini-file requires click on taskbar.- DOS-jobs (backup) must be manually deleted from taskbar (win95/98).- DOS jobs time-scheduled and may take a long time to complete. WORKAROUND: Let the timeout message stay on screen until you can see that all work in the command window is done.- Wordperfect will not work as standard word processor within LM.The problems with invoking other programs from LM are: Long file names. May cause troubles with system modules that has been migrated to the system from 16-bit systems. This is solved here (like in other systems) with the "8.3" short filename convention. (= Short names with " ~ " in them). The app will not conform to the scheme: Run: EXEAPPNAME filename that is it will not take the upstart file name as 1st parameter on the command line. This is the WP case. WP starts a dialogue which disturbs LM. (This is a "shell"-type and not an OLE-connection). Tips: Make a shortcut to the word processor exe file. Drag and drop a text file on it (Like ReadMe.txt). If it works, and works without any upcoming "Do you really want to.." ,LM will take it. Copy the shortcut path and filename from "Properties" of the shortcut and insert into the LM.ini file. Example: TextEditor = C:\Program Files\Microsoft Office\Office\WINWORD.EXE- Desktop map repaints with delay only. (Intentional to save resources, pls click update.)- Advanced auto start options with LM (auto start in minimized position) or (accidentally) double-clicking the start icon one extra time may case errors (like "referenced memory at..."). Escape via "Cancel" or "Ok" and start again. Also notice that the LM icon is removed a few seconds before it is actually terminated. Do not restart too soon; else you will either gracefully land in the current session or create the abovementioned conflict.

- Reinstalling (or version refresh of) Corel products (WordPerfect) may require reinstall of LM. (1 reported case).- The warning for .lck files and the suggestion to set LOCAL SHARE = FALSE in BDEADMIN.exe may reappear too often. Fixed in 1.121B. Also: SHAREMODEWARNING=0 suppresses the warning.- The PdxRbld freeware for packing tables may require a BDE-version setting in the ini-file. See PdxRbld documentation in Readme.rtf- The sub-application "Wordboiler" displays its window in the "always on top manner". However, this may be disturbed if other applications also use "on-top". If the Wordboiler disappears, look for it behind the LM main window. (You can place it alongside the

main application window.)- Marked/highlighted string in an item in connection with a find text will show first embedded occurrence - even if an exact search was performed. (Look further down if needed.)- Repaint of text item corners (color) may temporarily fail.- XML-import comparatively slow.- No pack of database within system. (See suggestion abot software on Help Center page).- URL capture insufficient as to length and unusual characters used.- Bugs in project handling and start-up of documents/web-pages were corrected in version 1.18D.- Character set adaptions - (See discussion on Help Center page).- Paradox database system (BDEADMIN.exe) must not be configured for multi-user access. If you get growing *.lck files somewhere on your disks during execution - run the BDEADMIN.exe database setup program and set LOCAL SHARE to false. (Select Configuration/System/Init).- The installation menu contains the item "Windows 95"; to be checked for such installations in order to get "drops" on the extended desktop right. However, these functions appears to be somewhat instable, you might have to checkmark "Windows 95" also for Windows 2000 installations.- The "Large Font" setting in Windows is not recommended - some dialog windows become distorted.----------LimitsMaximum size for text displayed in windows is 32000 characters. Generally, the maximum size for text displayed in other types of LM windows is a bit higher — it is a resource question. Anyway, we do not recommend longer texts than 32000 characters anywhere in an editable window.Maximum size of a concatenated text (like a project text stream or a bookmode-stream) is 250,000 characters.There is no limit on the size of text or HTML output from the Outliner, since this data is written to a file.Words (and thus Concepts) must not be longer then 38 characters. The same limit applies to Project names. URL: s (or file paths) in the projects box may be 80 characters long.Some URLs with complicated encoded strings or untypical characters are not supported, however those with commas at the end may work depending on a special fix. It remains that 80 characters will in many cases not suffice for URL capture. Since this is database-bound in LM, improvements will not come soon.When LM encounters a long filename and path, as a first resort it tries to shorten the file reference by using the "8.3" short filename convention. (These are shortened names with tilde [~] in them to replace the omitted characters.)The maximum number of entries in concept boxes or keyword/project lists in an item is set to 24.The maximum number of open windows is determined by your MachineIndex setting. By default it is set to about 80. Depending on your computer's memory situation, this limit may be too low, or in extreme cases, too high. If you get error messages like "cannot open window," they indicate that Windows has been severely strained. Try to avoid opening too many objects. The LM system tries to protect data in all such situations, but texts or keywords may be blanked out at such failures.The program was developed and compiled on a Windows 95 / 32 Mby / 133 MHz machine. Windows 95 machines need a setting Windows-95 in the menu Installation. This fixes a peculiarity in Delphi/Windows treatment of window control positioning. Windows 95/98 does not close DOS jobs (such as zipping and unzipping backups during back-up and restore operations). Sooner or later, you must close them on the Windows Task Bar. Other differences between Windows 95/98, NT, 2000 or ME have not been reported. (Windows 2000 is by far the best choice of system.)There is no rollback facility (i.e., the ability to undo changes step by step or to restore the state of a previous point in time). Even if you know how to handle a Paradox database, it is preferable to rely on back-ups if there are data base damages.Be aware of how great a demand you put on resources when loading big pictures or very long texts into LM. Be cautious by updating the database first and closing unnecessary windows. There are number of checks and limits encoded in the program, but they could fail in some cases. Use the backup function frequently. Your valuable work must be protected against various technical risks not all being inside the LM program itself."A Tale of Obsolete WoeThe software has both a freeware (LM2007) and a commercial version (Literary Machine Pro). However, if you look at the dates on the error messages, you can see that the progrma was developed sometime over a decade ago.

So, who wants a great idea that was not developed correctly, was difficult to install and use, and more difficult to uninstall.

Who wants to waste time with software, even if it is free. And, what teacher has time to waste?

So, a teacher that refers a free program that is more trouble than it is worth to the district IT Department will loose credibility. And, IT Department staff, if they have time to tinker with the program, will make jokes about that teacher for years to come.

So, do your homework before making requests of the IT Department that will waste their time.

Do your homework, and when great and useful Open Source products that meet the instructional needs of your students become available, you will have a clean reputation with the folks that matter most"your friendly, helpful, hardworking IT Department staff members.

Posted by Classroom Toolkit Newsletter in Open Source at 01:00

Monday, March 31. 2008

Open Source for Education

Kidspiration™: The "Why" of Educational Technology that Open Source Forgot
Inspiration™ Software released Version 3 of Kidspiration™.This software is the preeminent "concept mapping, mind mapping" resource for young students - Grades K-3. (Actually, there is no other software program that does the job of instruction young children as well as Kidspiration™.)
Concept maps and mind maps are visual tools for structuring thought. Colorful diagrams and images show relationships in concrete and understandable ways that prove to be effective teaching tools.
So, what could Open Source folks learn from the release of Kidspiration™ 3.0? (Flip Answer: The same thing that they should have learned with the release of Kidspiration&#8482' 1.0, or 2.0. the same thing that they should have learned from examining Inspiration™"s flagship product, Inspiration™, or Inspiration™ Software's Inspiredata™.
Here are the basics:Software must be multi-platform (Windows™ and Mac™ at a minimum)
Software must run on a school district or campus network, as well as on individual computers
File Format Compatibility for file sharing, and access to created data and images must be usable (preferable interchangeable) with other programs…especially Microsoft™ Office (The Word Processing and Presentation Programs in particular)
Software development must continue so that newer versions are compatible with the latest releases of computer operating systems, i.e., Windows™ and Mac™
Output from the software must be be compatible with methods for demonstrating pre-post learning progress, such as use within students' online portfolios
The technology must be transparent so that the attention of students and teachers remains focused upon instructional content (The technology must not be so difficult that it calls attention to itself.)
Software releases must be announced well in advance to allow school district administrators to budget for the software
Software must be released by the Spring of the year to allow school district IT Departments to test the software and roll out the updated software during the Summer
Software must function correctly with a network install, i.e., only requiring one server-based installation (as compared to installing the software on each desktop and laptop computer). But, the software must also be available on laptops that students and teachers use at homeTake-home licenses for the software should be available so that students and teachers can use the software at home. Of course, this is the argument for selecting Open Source software in the first place. But, if the software does not meet the instructional needs of students, there is no justification for wasting students' and teachers' time (or network storage space) by installing it.
SidebarKidspiration™ is available from many dealers and resellers. But, don't buy the software yourself since school districts receive huge discounts on site licenses.Site licenses allow campuses to install the software on as many computers as they wish. But, don't install the software on every computer, either.What you should do is install the software one time on your campus server; then, create a link to the program from your campus or district Intranet page.This solution eliminates plenty of hassles, and allows students to access the program from any computer that is connected to the campus network.
blockquote>The Curriculum Connection
Kidspiration™ can be used by young children. But, so what?
The question is, "What do young children learn from software that is engaging (and so easy that it doesn't draw attention to itself) that children learn crucial concepts?"
Look at some of the items that Kidspiration™ 3.0 includes:
Symbol Collection - over 3,000 symbols related to concepts that are taught in Grades K-5
Support for Multiple Subjects - It's not just for Math anymore
Views include - Picture, Math and Writing Views
Math Functions include:Color Tile Manipulation
Pattern Block Manipulation
Base-Ten Block Manipulation
Fraction Tiles
Fraction BoxesSymbol - Keyword Search
Support for Audio Input - Teachers can record instructions
Support for ELL and ESL students
Included Dictionary and Thesaurus -- over 13,000 words
Included Sight Vocabulary - Dolch and Frye's Word Lists
Over 150 cross-curricular teaching templates - with Standards-Aligned Lesson PlansIn addition, Inspiration™

released a companion teacher resource book, Kidspiration™ in the Classroom: Reading Essentials.

If you think that Inspiration™ Software understands the learning process for young children, and understands the needs of teachers in this high-stakes test-crazy world of education, you are right.
If you notice that Kidspiration™ integrates visual, auditory and hands-on learning across multiple curricular content area subjects while decreasing students' attention to the technology, you perceive the correct model for "Technology Integration." That is, the technology takes a backseat to learning, the technology delivers learning experiences and positive learning outcomes by disappearing from view. Transparent technology is integrated technology. Link to 50 uses of Inspiration™ and Kidspiration™
Link to Graphic Organizers on Classroom ToolkitExercises with Kidspiration™
Graphic Organizers in the Classroom on Educscapes™
Graphic Organizers at Graphhic.Org
Conducting Google™ searches for Curricular uses of Kidspiration produces over 14,000 resources. A Google™ search for Curricular uses for Open Source produces 540,000 entries. But, the Kidspiration™ resources are focused upon instruction, more targeted and more useful. The "Open Source" entries are focused upon the technology.> On the face of it, "Open Source" would seem to win as a resource for teachers. In practice, Inspiration™ software "out classes" difficult-to-use Open Source software that is geared toward "Techie" adults, software that draws attention to itself." (No pun intended.) Multiple searches with variations of search terms containing the words "Open Source software" produce plenty of results, but fail to focus upon direct instruction in a usable way.
Sidebar
If any Classroom Toolkit reader finds a suitable search phrase that produces links to resources that teachers can actually use (besides Classroom Toolkit, of course) please comment to this article entry.
Note: The Classroom Tookit strategy is to provide Open Source instructional materials, not software development. These materials are developed in a modular format to save time for teachers. Once teachers salvage some personal time; instead of being trapped in the personal drudgery of daily lesson planning, teachers can devote more energy and focus upon improving personal teaching skills.The Professional Development "Snowball"The other area that Kidspiration™ beats Open Source solutions is in the area of professional development.
Kidspiration™ focuses upon creative and innovation ideas for moving the curriculum towards higher-order learning skills. The Open Source "Techie strategy" focuses upon saving money with software that can be "tinkered with."…that is, software that allows programmers to rewrite its "source code."Teachers to Open Source Developers: "Who cares if we can rewrite software source code? We don't have the time or know-how to do that, and we don't want to learn. We love children, and we want our time to be spent communicating with children, and teaching them. We don't want to spend our time interacing with a computer screen. Just make the software do what students and teachers need, don't show off your technical prowess. We dont' care about 'technology for technology's sake,' and never will."SidebarThis "stilted" focus upon "free and cheap" leads to the "biggest sin" of the Open Source for Education Movement; i.e., forgetting to spend about one-third of the project budget upon instructional-focused (not-software-focused) professional development. See the Classroom Toolkit articles…
Teachers to IT Departments: You have Professional Development Homework Lack of Educational Intelligence: The Major Problem with Open Source Software
Teachers to Open Source Advocates: "You have Homework!"
But, Inspiration™ Software has a full range of professional developement options that focus upon instructional outcomes.SidebarKidspiration™ professional development sources include:
The Inspiration™ Software Professional Development resourcesTeacher Created Projects from the University of WisconsinUsing Kidspiration™ in the Classroom
Kidspiration™ Make and TakeKidspiration™ Free Trial
But, don't take our word for it. Download a free trial of Kidspiration™ now!Download a free trial of Kidspiration™ now…

Posted by Classroom Toolkit Newsletter in Open Source at 01:00

Friday, February 29. 2008

Open Source for Education

Pachyderm&#8482: Open Source Multimedia Authoring
Teachers need a true "Open Source" multimedia authoring program. And, Pachyderm™ might fill that need.Of course, Open Source zealots might not like the fact that Pachyderm™ is operating source independent and really is "Open Source" in the original sense of the term.
SidebarMany of the Open Source zealots seem motivated by a hatred and aversion to the success of Microsoft™. Of course hatred and prejudice are just as inappropriate in the corporate or software worlds as they are in the personal or professional worlds of teaching and living.
No lasting good comes from hatred, bigotry or animosity, and the negative attitude (that is contrary to the laws of success) that motivates some of these zealots is a limiting factor in the success of Open Source Movement.Real "Open Source" How So?Pachyderm™ is real Open Source because…It is usable from any Web browser
It is freely available (at zero cost)
It is licensed under the Apache-Open-Source License
Development was funded by grant money
You can obtain a copy of the software for yourself, today
Pachyderm™ differs from some "Open Source" projects in that...It was developed by an organization to solve a specific need
The developing organization controls development, i.e., development is not left to a loose confederation of volunteers who do their own thing
The features of the product are specific and focused upon specific needsSidebarSetting needs and building a project with a unified focus is atypical of the "Open Source Movement."
Open Source projects are most often group-developed "knock offs" of effective commercial software.
Open Source project developers allow the commercial developers to spend the Research and Development (R&D) funds to develop a product. Then, the Open Source folks step in and copy (or imitate) the commercial product.
Of course, imitation products often fall short of the capacities and features of original, commercial products. The excuse provided for delivering a less-than-stellar product is that "the Open Source product is free."
People that pay nothing have little to complain about, and people that pay nothing lack leverage (except for their ability to employ the delete key in dealing with products that fail to meet their needs).What teachers and students need are high-quality programs that interface with every other program. These high-quality programs should interchange data with (and interoperate with) every other program. Teachers and students need programs that allow the file formats of every other program to be used. Of course, commercial programs have not risen to this level of compatibility, yet, either.
But this interoperability is partially responsible for the mass appeal of Microsoft™ Windows and Apple™ Macintosh computers. High-end commercial programs interface with and interoperate with other high-end programs. Commercial programs enjoy this advantage, most Open Source programs don't.Pachyderm™ is Free, So, What's the Catch?Pachyderm™ is a server-based software application.
This means that you need a server to be able to use this software, so you can't easily install the program to your desktop computer.
So, even though the software is available at zero cost, knowledge of server and database administration is required if you want to use the program.What if you Can't Configure a Server?Unfortunately, Classroom Toolkit was not able to test Pachyderm™ because the server requirements were too time consuming to implement on our server (Microsoft™ Server 2003), and the amount of work required to test the software would exceed the time available to research this article. SidebarHere is a sample of the instructions for installing Pachyderm™. (Note: If you feel that these instructions are unintelligible, just refer them to your school district's IT Server Operators or Network Administrators.)
"Installationa. General
Before setting up Pachyderm 2.0.x on any machine, you have to make sure you have several things installed first:Java Runtime Environment 1.5. Sun's JRE is recommended. Available from: http://java.sun.com/j2se/downloads/
Web Server with proxy support. Apache is recommended. Available from: http://httpd.apache.org/
Relational Database Management Server. MySql is suggested. Available at: http://dev.mysql.com/downloads/
ImageMagick. Available from:
http://www.imagemagick.org/script/download.phpNote: The Mac OS X Server is by far the easiest install for Pachyderm, because there's no need to install WebObjects or worry about the WebObjects frameworks. First thing you need to do is copy the appropriate directories to the appropriate location on the server:Copy Pachyderm2.woa into /Library/WebObjects/Applications
Copy the contents of Frameworks/Pachyderm into /Library/Frameworks

Copy the contents of XML into /Library/Application Support/Pachyderm
Copy the contents of wwwroot into /Library/WebServer/Documents/pachydermOnce you've done this, create a database 'pachyderm', and create a user (default is username:'pachyderm', password:'pach=derm') and give that user full privileges on the pachyderm database. Run the following scripts against the database:pachyderm_create_tables.sql
load_data_admin_user.sql
load_data_compdescription.sql"Source:Pachyderm™ Installation InstructionsIf this set of installation instructions is incomprehensible to you, you are experiencing firsthand the reason that Open Source software has not made noticeable inroads in its use in our school districts.
Commercial software is easier to install, and commercial software developers include all the helping applications in their installation packages.Commercial software developers do this by licensing the software components, and passing on the cost to purchasers.
Of course this suits everyone because the licensing costs are smaller for large developers (they buy in bulk), and because the installation process is automated.
The typical commercial program installation routine (even for servers) consist mostly of clicking on the "next" button.
Pachyderm™ is a great Open Source program, but unless teachers work for a school district with an IT Department that is willing to experiment with non-commercial products and trouble shoot how to make these products work, teachers will probably find that paying the $99 per year for the Pachyderm™ hosted product is the path to success…a path that avoids the high-stress of entering the technology "Twilight Zone" of difficult-to-deploy, free software.
Pachyderm™ allows the use of its software on its servers if you purchase a yearly account license. This way, a teacher (and students) can access their Pachyderm™ presentations online.
The range of access runs from use of the software (basic account $99 USD per year) to use of the server and software (for 5,000 users at $7,500 USD per year - members or $10,000 USD per year - non-members).
Use of the server allows either downloading the multimedia presentations, or allows leaving the creations on the Pachyderm&#8482' server and linking to the Flash-formated files.
Pachyderm™ can also be hosted on a dedicated server for large numbers of users for only $5 USD per user per year.
This may seem like a subversion of Open Source; i.e., providing free software to teachers, but charging to use the software. But, Pachyderm™ was developed for museums to allow them to provide online presentations related to the museum's collection.
Pachyderm™ also partnered with many big university systems that have no difficulty paying for servers of their own, universities that have no difficulty finding the technical talent to install and manage those servers.How does the Pachyderm™ Program Work?All that is required to create Web-accessible multimedia presentations with Pachyderm™ is a Web browser.
With a Web browser you or your students can…Upload mediaAudio - MP3
Images - JPG and GIF
Movies - MOV and FLV
Link the templates
Publish the presentation
Website
CD or DVDWho uses Pachyderm™?Pachyderm™ is used by schools and museums of all sizes.
This is because the Pachyderm™ software is so easy to use.
The software and hosting is also cost effective.
And, educators know that multimedia presentations increase students' memory and recall…especially when students create the presentations themselves…or, when students collaborate on their presentation projects.Real Educational UseThe members of the Pachyderm™ Project read like a "Who's who" of museums and universities.
Here are some helpful links to Pachyderm™ Partners…
Pachyderm™ Partner List
Pachyderm™ Museum MembersSidebarLink to other Pachyderm™ resources…Training Timeline from the Maricopa Community College
Link to a Description of the Pachyderm™ software's design
Link to the Pachyderm™ Developers' Site
What this Open Source Project Means to TeachersTeachers should feel frustrated that this great online multimedia presentation software resource is so close that they can hear it breathing through its long trunk, so close that they can smell peanuts on its breath…yet so out of reach for themselves and their students.
Teachers who don't have access to district servers, and teachers who work for school districts with IT Departments that are selective about what applications they support will remain frustrated.
But, there are no viable alternatives.
Tinkering with servers, and installing programs such as Pachyderm™ is not something that many teachers can try at home unless they invest in server and network resources.
While many teachers could learn the process, few have the spare time to meander through the IT World…the call

of the "wild and wooly" high-stakes test keeps teachers' discretionary activities in check.
One benefit: Since the developer of Pachyderm™ is a non-profit organization, teachers should have little trouble getting a purchase order for the Pachyderm&#8482' service processed through their school district's bureaucracy.

Posted by Classroom Toolkit Newsletter in Open Source at 01:00

Thursday, January 31. 2008

Open Source for Education

Are Any Open Source Products Useful for Teacher Self-Development?
Open Source products are available for lots of "Techie" purposes, but are there any Open Source products available for Teacher Self-Development?
There are a lot of teacher resources for integrating technology using Open Source software, but what about teacher self-development resources that are geared to personal and psychological, intrapersonal and relationship oriented, or just plain skill development?SidebarHere are the Google™ search results for the search term, "teacher 'self-development' 'open source'".Search Google™ for teacher "self-development" "open Source"The top search results include topics such as Web 2.0, "Video Papers" Open Source Portfolios and mentoring for technology.The most concise description of this externally-directed focus upon technology seems to be…"Everyone should have the necessary skills to benefit fully from the Information Society. Therefore capacity building and ICT literacy are essential. ICTs can contribute to achieving universal education worldwide, through delivery of education and training of teachers, and offering improved conditions for lifelong learning, encompassing people that are outside the formal education process, and improving professional skills."SourceUNESCOhttp://portal.unesco.org/ci/en/ev.php-URL_ID=15922&URL_DO=DO_TOPIC&URL_SECTION=201.htmlOf course this should not surprise us. Computer skills (hardware, software and applications) have been the rage over the past decade or more. And in typical education fashion, the pendulum swings toward extremes instead of a realistic, balanced focus.So, how are we to approach the question of Open Source products for teacher self-development?Software Libre: Not Software GratisIn discovering if there are Open Source resources, we have to determine what the term "Open Source" means. Few teachers know what "Open Source" actually means?Open Source software is free to use and keep, but also free to change, recompile, reconfigure, change. Open Source software is also free to sell.But, teachers use the term, "Open Source" to mean free software (as in no cost). Unfortunately, the term "free" is misleading.There are a lot of "free" software products that are not Open Source.Types of free, but not Open Source software include;Freeware - Free to use. Copyright ownership retained by developer. Others are not allowed to reverse engineer (take apart), update, revise, or change the software in any way. Others are not allowed to sell this software
Banner Ware - Free to use. Copyright ownership retained by developer. Others are not allowed to reverse engineer (take apart), update, revise, or change the software in any way. Others are not allowed to sell this software, either.
Shareware/ Trial Ware - Free to use for a short period of time, usually 30 days or less. Copyright ownership retained by developer. Others are not allowed to reverse engineer (take apart), update, revise, or change the software in any way. Often teachers can get enough use of Shareware during the trial period to last the entire school year. Others are allowed to sell this software if they are affiliates of the software developer. After the sale of shareware software, the developer pays a commission to the sellerUnfortunately school district IT Departments fear Shareware/ Trial Ware and do not allow it to be installed.
The reason that school district IT Departments eschew Shareware/ Trial Ware is that after 20 or 30 days, the software must be purchased (there is no money) or uninstalled (more work for staff they don't have)Any Shareware / Trial Ware remaining on the district's computers after the trial period could be considered pirated software, and the district automatically becomes liableShareware / Trial Ware offers many teacher self-development and self-improvement opportunities, but these programs are not freeAd Ware - Free to use because the software contains ads. Copyright ownership retained by developer. Others are not allowed to reverse engineer (take apart), update, revise, or change the software in any way. The danger associated with Ad Ware is that the software acts as a "Pop Up Magnet&; that bypasses your browser's filter. Also, anti-virus programs and anti-spyware programs may not remove the Ad Ware programs because you gave the Ad Ware developer permission to send you these Pop Up Ads when you installed the software. If you read the fine print on the Ad Ware "Terms of Service" Agreement, you will see that you pay for the privilege of installing the software without cost by allowing these intrusive ads to be sent to your computer
Viral Ware - Free to use because the software is re branded to carry ads. The difference from Ad Ware is that new users can pay a fee and have their ads inserted instead of other people's ads. After the ads are inserted, the software is given away. Copyright ownership retained by developer. Others are not allowed to reverse engineer (take apart), update, revise, or change the software in any way
Spyware - A large variety of "bad" software that does "nasty" things. This category includes: Software that captures Web user data, software that contains Trojan viruses, worms, key loggers (captures and sends your user names and passwords to the developer), etc.The fact that most teachers do not possess the skills (or the time) to decompile, reverse engineer, repackage, update or re-brand Open Source software may be a clue as to the reason that teachers lump all free to use software under one term.SidebarOpen Source software is coming to be called, "Libre Ware." This means "free" as in permission to do what every you want with the software (including selling out to a big company for $1

billion USD as MySQL just did with its sale to Sun Microsystems™).Here is a description of the difference…"'Software Libre' is a name that some people have started using for 'Free Software' in order to clarify that the 'Free' in 'Free Software' has the meaning of 'Libre' rather than 'Gratis.''Open Source' is a relatively new term, denoting a particular organization's effort to market software libre and to define it in a more specific way that is friendlier to the capitalist marketplace.Source:Library Juicehttp://libr.org/juice/issues/vol5/LJ_5.2.html" So, many teachers call all "free to use" software "Open Source" when most of the "free software" is not really Open Source.There are lots of free programs that teachers use every day that are not Open Source, but commercial programs. For example:Adobe™'s Acrobat Reader, Flash Player and Shockwave Player
Apple&#8482's Quicktime Player
Google™'s Application Suite and Search Engine
Microsoft&#8482's Internet Explorer, Media Player and Live Search
Mozilla&#8482's Firefox
Real&#8482's Real Player
Sun™'s Java Package and Java Virtual MachineThere is another class of Open Source programs that only a few teachers are interested in, server-based programs.Software in this category of programs includes Web Servers, Blogs, Forums, Wikis, and Learning Management Systems.The problem with these Open Source systems being used for self-development is that they take a lot of time to develop, and are more suited for instruction than personal self-improvement.Avoiding the "Straw Man" FallacyOur exploration of Open Source solutions for teacher self-development should avoid using a "Straw Man" argument.SidebarA "Straw Man" fallacy is one where a position that is easily criticized (even lambasted) is set up so that it can be torn down.Here is a definition:"A straw man argument is an informal fallacy based on misrepresentation of an opponent's position. To "set up a straw man" or "set up a straw man argument" is to create a position that is easy to refute and attribute that position to the opponent. Often, the straw man is set up to deliberately overstate the opponent's position. A straw man argument can be a successful rhetorical technique (that is, it may succeed in persuading people) but it is in fact a misleading fallacy, because the opponent's actual argument has not been refuted."Source:Wikipediahttp://en.wikipedia.org/wiki/Straw_man
The way that this article could pose a "Straw Man" argument is to suggest that…Education is about children and relationships, not about computers and technology
Computer programmers and software project volunteers are "techies" who have limited interpersonal skills and minimal success with interpersonal relationships
Computer programmers and software project volunteers wouldn't be working on Open Source projects if they had a "Life," since they wouldn't have the free time to donate to the project
Computer programmers and software project volunteers have limited psychological insight into their own issues. That's the reason that they have withdrawn into their own little, isolated world of computer programmingOf course, though these statements have face validity, i.e., on the surface the statements appear to be "true;" the generalizations are more "urban myth" than reality. These criticisms of Open Source software development are misleading.In reality, programmers and software project volunteers are followers, not leaders, and most of the projects that they work on are copies of commercial software. This is the Open Source "Rule of Copycat Knock off Software".SidebarThe one exception to this "Rule of Copycat Knock off Software" that we are aware of is Compendium™. Compendium™ is Open Source dialog analysis software.Obtain your copy of Compendium here.Most "Copycat Knock off Software" is inferior to the commercial version that it imitates. What can you expect for free?But, is free good enough for teachers?Open Source and EducationThe whole issue of Open Source for Education centers upon finances and public demand that teachers integrate technology.Unfortunately, school districts have:Failed to fund basic education, let alone technology-driven education
Placed the burden of learning to integrate the technology upon teachers
Moved to force teachers to learn to use the technology without paying teachers to do so, of without providing adequate release time to do so
Limited the size of IT Departments and the technical support staff that is needed to actually use and manage the computer, servers and software that Open Source integration requiresHowever, these limiting and self-defeating economic forces have no bearing to the real problem, i.e., that school districts failed to discover, test, measure and promote (to the public) a direct rationale for the integration of technology with current academic learning.SidebarMost of the arguments for integrating technology into instruction refer to job skills once students graduate.And, the few school district Open Source projects that are touted as successful consist of nothing more than high school students using Internet research access and basic word processing software on cheap computers to write reports and term papers.Of course, any teacher that has developed basic desktop productivity software skills can use either Open Source or commercial software to track, manage and maintain his or her personal self-development efforts.But, this is not using Open Source self-development, but Self-Development using Open Source tools.The problem here is that teachers can do the same, with less file compatibility issues by just using the industry leader's Office software.But, there is one Open Source software product that teachers can use for personal self-development that does not have a commercial competitor.How Compendium™ cam be used for Teacher Self-Development?How can Compendium™ improve teacher self-development?The answer is by having a map of the dialog of key players, sponsors, stake-holders, and being able to sort through the forest of statements to find the crucial needs, fears, motivations, ideals and values of

these groups.But, Compendium™ can also be used to explore your personal issues in depth if you imagine yourself to be composed of groups and committees.Appreciating that you operate (as a professional and as a person) as though you were many different, (some related, some compartmentalized, some departmentalized selves) leads to self-understanding, greater clarity of focus, and improved internal collaboration among your crucial needs, fears, motivations, ideals and values.Obtain your copy of Compendium here.

Posted by Classroom Toolkit Newsletter in Open Source at 01:00

Monday, December 31. 2007

Open Source for Education

Lack of Educational Intelligence: The Major Problem with Open Source Software
On the face of it, license-free software seems like a "better-than-the-proverbial-sliced-bread" idea.We can download gigabytes of tools to drive our instructional delivery and instructional management. We can install hundreds of learning-aid tools that propel student learning to "high-stakes-test-scoring" heights.We expect that this license-free stuff will:Make students learn better, faster, easier, more…
Reinforce the concepts that we meticulously lectured about
Solidify cognitive connotations between (and among) ideas and intellectual constructs that have become anchored in our students' idea repertoires
Launch the "knowledge-cognition-analysis-application-synthesis-evaluation" higher-order thinking skills paradigm to nose-bleed-producing heightsSidebarOpen Source software is not the only free stuff available for teachers to use for personal productivity or student learning. Other categories of free tools include:Freeware: (Free software, but you can't alter the source code)
Trialware: (Free to use for a trial period, often 30 days. Sometimes, this is more than enough)
AdWare: (Free to use software or services that are paid for by the ads that are flashed in front of you)
Commercial No-Cost Products: (Software tools that are no-cost that are used to sell expensive products. For example, Adobe™ Acrobat Reader is the software that reads all those "PDF" files that you find on the Interment. Adobe™ gives this reader away so that people who want to share printable documents are influenced to purchase the expensive Acrobat™ (PDF creator) software.Unfortunately, reality seldom bends or contorts itself to the will of our fantasy and wishful thinking.
Why no Educational Intelligence
Open Source software (freeware and other no-cost tools) are not created with teachers in mind.
In fact, teachers have to scramble and strategize to make use of most software, even the "educational type."
Although talented and top-notch programmers earn three to four times as much as expert and "long-term senority-level" teachers, programmers:Do not understand the job of teaching (They don't have a clue)
Could not step into your classroom and keep order, let alone get your students to complete the assignments
Believe that teaching is easy and that clear explanations (embodying the logic used in programming) are all that are needed to prompt students to learn
Could not bring your students anywhere close to the performance that you will bring them on the high-stakes testIn addition, Open Source projects are:Programmer Community Driven: A loose (sometimes, ad hoc,committee of volunteers decides on a project idea, and volunteers contribute to the overall code devotement
The programs are often "knock offs," i.e., "copy-cat ideas" of commercial programs, especially of Apple™'s ideas, but also of Microsoft™'s and Adobe™'s ideas.Due to the distributed nature of the Open Source development, the software does not fit togetherSidebarThe exception to this scenario is Novel™. Novel™ has developed an Enterprise Level solution of Open Source software that is tailor-made for school districts.Of course, the design, engineering and testing of Enterprise-level software is expensive. Therefore, Novel™'s solution is not "free."
In addition, Novel™'s solution is also compliant with the Schools interoperability Framework (SIF)Schools Interoperability Framework (SIF)Most Open Source software does not focus upon integration with other software that is found in school districts.
However, commercial software vendors see the wisdom of this strategy, and the major players have joined the SIF Association.
Who are the major players? Here is a partial list of companies that teachers might be familiar with…Apple™
CampusWare™
Chancery Software™
Compass Learning™
Curriculum Associates™
Curriki™
IBM™
Microsoft™
Novel™
Pearson™
Plato™
Renaissance Learning™
Scholastic™

Visual Software™For a complete list, visit the SIF Association site…
Membership in the SIF Association by school districts ranges from entire states with vision, including:Alaska
Pennsylvania
South Carolina
Virginia
WyomingOr, State Departments of Education and a few school districts in the following states…Arizona
Connecticut
Florida
Hawaii
Indiana
Kansas
Kentucky
Minnesota
New Hampshire
New Jersey
New York
North Carolina
Ohio
Oklahoma
Oregon
Texas
Wisconsin
WyomingWhy aren't the rest of the states alert enough to provide the vision and commitment, plus the funding to become compliant with a software standard that would provide the following benefits…?Access to better quality data
Spending more time on instruction and less on paperwork
Money savings…and not just on software purchase, software management; but also on the work that teacher, librarians, counselors and campus administrators must perform
Reduced support costs
Access to SIF implementation tools and support
Network with a wide variety of local, state and federal education decision-makers -- as well as software developers and vendorsIf joining the SIF Association seems like a "no brainer," and you don't see your school district or your state Department of Education on the SIF Association membership list, then check around to find out the reason that your school district or state is lagging behind.SidebarOne possible reason is that other states would like the few states with vision to pay for early development. Then, they can join in later without supporting the organization in its development.Another reason could be that the state is grappling with the effects of The No Child Left Behind Act (NCLB) and is too busy propping up test scores to care about the extra work that teachers and school district staff have to perform…due to the fact that productivity and learning management software fail to work together.
A third scenario, like happened in Texas, is that the State Department of Education doesn't have the staff to promote an initiative that is useful for schools. In the Texas case, the Texas Education Agency fired all the "Ed Tech" folks several years ago, and has taken years to rebuild its technical expert staff.
Note: This sort of mismanagement creates what we call in Texas the "TwoFer Effect." The "TwoFer Effect" means that you get two for one, i.e., for each year that the fired staff is not rehired or replaced, the state lags behind by two years. For example, if the Ed Tech staff is not rehired for five years, then five years of progress are lost; then, it takes two or three years for the staff to ramp up the program that was allowed to languish. So, the reconstituted staff starts with a seven or eight year lag before they can begin making up the five years that were lost. The lost progress is easily a decade or a decade and a half if the project languishes for just five years.
Teachers Point of ViewTeachers focus their attention and life energy upon instruction. Teachers are "single-minded" about this.
In addition, teachers are often "swamped and overwhelmed" by lots of paperwork and "rinky-dink" non-instructional (non-payoff) tasks that flush upon them from the chain-of-command bureaucracy.SidebarInformation flow is the crux of "Educational Intelligence." The product of applied intelligence is called "wisdom."
In most work sites, teacher wisdom flows one way, i.e., from teacher to teacher; or, from teacher to students. Wisdom seldom flows two ways, i.e., from teacher to principal; or, teacher to superintendent; and from teacher to student.
One way information flow, is the rule in a "chain-of-command" organization. But, if educational intelligence cannot come from the "top" (because it doesn't reside there); and if educational intelligence is squelched from the bottom (because the bureaucratic, chain-of-command, control valves block the upward flow) then how can Open Source solutions gain a foothold in education.
If educational intelligence doesn't drive instructional management and instructional delivery, how does software that was not developed with clear educational principles stand a chance of success?

The Reason that Educational Intelligence won't go "Open Source"Educational Intelligence, the ability to collect data and create decision-supporting "Dashboards" that collect, interpret and deliver meaningful data in real time, will not enter the Open Source arena.
These programs are complicated, and the programs rely on a solid understanding of the thought infrastructure and underlying principles behind those decisions.
Developing educational intelligence would require that we:Dump our educational theories and base our strategies and instructional practices on "the facts of observable and measurable observation"
Evaluate the past decisions of bureaucratic decision-makers, and expose the wisdom (or lack thereof) of all those "magic-bullet" innovations that failed to bare fruit
Pay some really high-priced technical talent to custom-build the system (by extremely high-priced, we are talking about $250 to $300 USD per hour and multiple years of billable time)
Pay for some really high-priced hardware, software, support contracts and technical trainingSchool districts that balk at paying $150 to $175 per hour for technical help just crumple when they find that these Business Intelligence folks command payment in the $250 to $300 dollars per hour range.
Can't you see our school district folks responding like whimpering dogs that have just taken a "big-stick beating" when they learn what such a system would cost? And, that does not factor in the lead time that it will take while the technical folks get "up to speed" (climb the learning curve) concerning the underlying processes and educational intelligence strategies.
If you are going to measure strategic processes, you better know how the measurable activities. benchmarks, and underlying systems work.Therefore, the project will amass a huge cost before the first bit of helpful technology is created.
SidebarOne reason that Educational Intelligence will not go "Open Source" is that there is so much money to be made for the people that can develop this type of application. For example, recent news reports show that major software players went on a Business Intelligence "shopping spree." For example:SAP AG™ purchased Business Objects SA™ for $7 billion USD
IBM™ purchased Cognos™ for $5 billion USD
Oracle™ purchased Hyperion Solutions Corp.™ for $3.3 billion USDOf course, these cash-rich, high tech companies know something that school district personal don't know, i.e., that streamlining the decision-making process to enable front-line, operational employees to make real-time, on the spot decisions increases customer satisfaction and profits.
An analogy for school districts would be allow teachers to make on-the-spot spending, discipline and scheduling decisions without having to obtain prior approval.SidebarFor example, Federal Express™ provides a budget and authorizes supervisors to make $100, "no questions asked" refunds for any shipment that was delayed.
Fed Ex™ has the wisdom to know that customer satisfaction is crucial for repeat business in their competitive industry. Sure, this is an expensive strategy, but Federal Express™ understands the business intelligence enough to know that loosing angry, unsatisfied customers costs emmensely more.Anyone that has seen the…Endless delays in getting school district decisions made
Tricks of giving credit for good ideas to supervisors, even after they did everything possible to sabotage the idea
Squelching of initiative and great ideas by campus leadership because it wasn't their idea
"Protect your tail feathers" hesitancy in trying something new by staff at all levels of the school district's organization
"Don't do anything controversial" and "avoid complaints at all cost" mentality that paralyzes basic, common sense action…knows that "bureaucratic nonsense," rather than "educational intelligence" often operates with impunity in our school systems
If Open Source solutions were developed with "educational intelligence," the entire bureaucratic structure (and all its foibles and inefficiencies) would stand exposed. (Talk about an emperor without clothes!) Of course, school district officials should welcome "full, frontal" exposure to all aspects and operations of their system because they hold these assets and responsibilities in public trust.
If Open Source could build on "educational intelligence," then all school district operations would become transparent, i.e., open.
Worst PracticesThe top four worst practices for integrating educational intelligence are:Assuming the average teacher has the time, expertise, desire and technology resources to use educational intelligence tools
Expecting Microsoft™ Excel to become the default educational intelligence platform, and failing to provide the professional development to enable teachers to use a robust database management system; i.e., Microsoft™ Access, FileMaker™ Pro
Selecting technology and educational intelligence tools without identifying, measuring and benchmarking a specific instructional need
Assuming that a technological system will solve all information access and delivery needs if the decision-makers at the top keep sole access to the decision-making controlsIf school districts were to adopt educational intelligence-based Open Source solutions, the decision-making power structure would fall "like a house of red tape."
So, few school district executives are going to fund the development of a system that spotlights their decisions. More importantly, even fewer school district decision-makers will fund a system that launches instruction to new heights of

efficiency and effectiveness if that technology means that underlings (i.e., teachers) will be able to make decisions. Educational intelligence is a "two-edged sword," (i.e., transparency and accountability). Top-level school district bureaucrats' authority stands to be cut from under them, their of invincibility stands to be maimed, and their jobs stand to be slashed.Best Educational intelligence PracticesFor Open Source solutions to become viable in our schools, research-based, tested and verifiable applications must target the progress of measurable student achievement.Then, Open Source solutions could…Make sens out of the complex data that floods teachers, but provides little direction for instruction

Enage teachers as Subject Mater Experts (SMEs) and build solutions based upon patterns and best practices for instruction

Provide enough professional development in database design, administration and use so that teachers upgrade their skills from an Excel™-only strategy to a true database strategy for information processing

Put data collection, data management and data-driven decision-making in the context of instruction, i.e., Educational intelligence, where teachers' higher-order understanding of the instructional process predominates in district budget and policy making

Identify specific instrucional needs, then deliver information that targets those instructional goals

Hire support staff so that teachers can "off load" bureaucratic busy work" in favor of focusing teacher time on instructional delivery and instructional managementWhen an Open Source solution is developed that is based upon Educational intelligence, school districts will become empowered to root out teacher and administrator worst practices, and prevent new waste and bureaucatic abuse.The key points to remember when launching a Educational intelligence-based technoligies are:Only embark on an Educational intelligence project for a specific instructional target

Identify needed data, then establish a cost-effective integration strategy

Identify procedures and methods for infusing that data into the hour-by-hour activities of teachers in ways that decrease the amount of work that teachers have to do, i.e, make teachers' work easier

Create "always-on dashboards" that feed live (real-time) data to teachers, and summary data to administrators

Create "What-If dashboards" that project trends so that teachers and administrators can make real-time course corrections in instructional management and instructional deliveryIncluse teachers in all levels of the development and in all levels of the decision-making process (This step is crucial.)

Include teachers on the design, development and management teams that build a Educational intelligence-based process

Ensure that the Educational intelligence-based solutions…Directly deliver measurable increases in student achievement

Make work easier for teachers and support staff

Posted by Classroom Toolkit Newsletter in Open Source at 01:00

Friday, November 30. 2007

Open Source for Education

How the Free Camtasia™ Offer (and Other Commercial Software) Demonstrates the Problem with Adopting Open Source Software in School DistrictsEveryone says that schools should save money, perform magic and operate within their budgets. And, software licensing is an easy target for this "fantasy script" since few people outside the district's IT Department understand…Software Licensing requirements
The huge discounts that schools already receive on commercial software
The huge challenge presented in rolling out even "free" software
The minor cost (percentage) that educational software adds to the total cost of computer network operation
The reason that school districts can't let teachers and students install software (district licensed software, teacher or student owned software, Open Source software, Freeware, Shareware, Trial Software)
The file storage problem if every teacher and student could create their own videosThe Camtasia™ Free OfferThe Classroom Toolkit article, Free Camtasia™ Studio: Create your Own Desktop Videos provides links to a great offer from TechSmith™, the developers of Camtasia™ Studio. Camtasia™ Studio is the premier desktop video creation program for Microsoft™ Windows personal computers (PCs).
Link to the Free Camtasia™ Studio: Create your Own Desktop Videos articleSince…Most school districts run computers using the Windows™ Xp operating system
Video is marvelous for building multimedia instructional aids, demonstrations, presentations and learning center activities
Teachers could use the same program at home to create instructional videos without cost to the district
The Camtasia™ Studio program could run on district and home Apple™ Mac computers that use the Parallels™ application software
…you would think that grabbing a copy for each computer in the district would be a "no brainer."
But, not only is grabbing hundreds of "free" copies of Camtasia™ for your school district a bum idea, but, such a scheme is unworkable.An Offer Gone ViralTechSmith™ intended for this Camtasia™ Studio license offer to be available on a United Kingdom magazine CD, but the offer leaked to the Internet and Blogs, E-mail and Newsletters spread the word about the outstanding opportunity to obtain a previous version without cost, and to upgrade at an outstanding price, i.e., $149.00 USD.
So, what's stopping every teacher in the US from downloading, installing and using Camtasia™ Studio Version 3.0.1 for as long as they use Windows™ Xp? Answer: Nothing!
What's stopping school districts from doing the same thing with every computer that they have? Answer…Practical Logistics
High Cost
Staffing
Inability to Upgrade Effectively
Exponential Increases in District Network Storage Requirements
Exponential Increases in District Internet Bandwidth UsageIn short, the problems with using a "free" version of Camtasia™ Studio parallel the problems with using lots of Open Source products in our schools.
SidebarOf course, this problem pales in significance to the real problems with Open Source software in particular, and Technology Integration in General, i.e., The lack of 1.) a specific connections between technology Software applications and Measurable Student Learning, and 2.) the lack of Educational Intelligence that supports the investment of time, money and personnel resources for these strategies.Note: The lack of Educational Intelligence is the subject of our Open Source for Education section for our upcoming (December, 2007) Classroom Toolkit Newsletter.
What are these problems? What makes this scheme to use a world-class product without cost so unworkable?
First, the license keys that TechSmith™ provides are individual, rather than Volume License keys.SidebarLicense issues are complex and beyond the scope of his article. Here are some references…

Software Licensing Glossary from CDW
Software Licensing: Protecting Your Organization From Lawsuits
Camtasia™ Studio Licensing Prices
What this means is that instead of using a "generic license" that covers multiple computers, i.e., a "volume license," each licence key would have to be tracked individually. Even worse, if the product were to be upgraded, each individual license key would have to be supplied, by hand, at the computer keyboard (instead of remotely or automatically).
This presents several huge problems:License numbers would have to be tracked by computer and computer location
Computers could not be "imaged," i.e., cloned in a fully operational state. (The problem is that every cloned computer would have software installed with the same license number), a violation of the licensing agreement

The software would have to be installed without the licensing number, and the licensing number would have to be entered by handOpen Source advocates might claim that the lack of license numbers is a benefit for Open Source software. Well, it might be, except that the Open Source software applications seldom have automatic update and automatic patch (bug fixes) online. So, when software must be repaired the software must be handled, one computer at a time for Open Source environments, too. SidebarThere is one exception to this Open Source scenario, i.e., Novel™ Enterprise Solutions.
Novel™ is the one Open Source system that scales to complex network needs, has all the components that a modern, robust school district network requires, is complaint with the Schools Interoperability Framework (SIF), works moderately well with Microsoft™ Windows, and has third-party support.
More on the Novel™ solution later.Time is Money and Other PlatitudesManaging a computer network with lots of computers is different than handing one computer at home. This is the same issue of scale as cooking lunch at home for four people compared to cooking lunch for a campus of 400 people.
Here is the math for what I call the "Five Minute Fix."

What you notice is that 1.) a "five minute fix," with 2.) five minute travel time between computers (for example room to room). and 3.) an average of 7 minutes start up (i.e., waiting for system to boot time, etc.) for 800 computers takes six weeks of full time technical support.
This means that…Computers must be kept as similar as possible
Maintenance and support must be automated
Lots more technicians need to be employed than most school districts actually hire
Small service requests are not trivial when dealing with large numbers of computers
The cost of a "free" update involving "five minutes" is the amount of wages paid to the technician that is performing the work for six weeks.
Service Level Agreements (Maintenance agreements that all districts should have to guarantee computer uptime) is very expensiveThe only realistic way for school district IT Departments to approach adding software to network computers is by cloning fully operational, fully tested, almost fully identical computer systems.
SidebarAnd what about the Novel™ Open Source Solution?
The Novel™ Enterprise Solution is the only Open Source solution that is robust enough, scales to networks of the size that school districts need, and supports compatibility (and interoperability) with the Microsoft™ server and desktop infrastructure.
In addition, the Novel™ Enterprise Solution is Schools Interoperability Framework (SIF) compliant, the only Open Source product that meets this standard.
So, what is the problem with this Open Source solution that the "free and no-cost" Open Source proponents fail to tell school district decision-makers.Answer: Novel™ Enterprise Solutions are not free.While Novel™ Enterprise Solutions may cost about half of what the Microsoft™ Solution costs. The software is not free.In addition, the cost of network hardware and infrastructure, technical staff and technical support are equivalent to the costs of Microsoft™s Solution (maybe higher, even a lot higher in rural areas where Novel™ expertise is not readily available.And, service level agreements are also costly.
Here is what service agreements cost for servers at CDW-G, a price leader in providing hardware, software and support to school districts.Cost of technical support for Novel™
Here is what service and support cost direct from Novel™
Novel™ Server CostsSo, what if we install the software and don't purchase the service level support that is needed?Well, if network downtime, lost data, unhappy, grumbling students and staff and negative community reaction to the effectiveness of their investment in school district technology are important; then failing to provide service level support and relying on a "cobbled-together" conglomeration of free software is a quantum level more expensive.The Rest of the StoryThe cost of installing, managing and maintaining a computer network is so expensive that software costs represent a small fraction of total costs. Here are some costs:Computers
Servers
Wiring
Maintenance Contracts
Network Switches and Routers
Technicians, Network Administrators, Database Administrators, Server Administrators
Leased Lines (such as T1 lines, T3/DS3 lines, OC3 lines, etc.)
Internet Access
Staff DevelopmentOpen Source advocates will argue that "With all these costs, why not save as much money as possible on software licensing?"
The answer is that "With so much money, time and staff invested in a computer network, wouldn't the investment be protected better by using tested, supported, maintained and upgraded software?"
One analogy might be the wisdom of purchasing an expensive new car, and running that car with balding tires.SidebarThe cost of hiring competent IT Staff is high for any platform, including Open Source professionals.Here are some recent average salaries, i.e., 2006.

These average salaries mean:School districts don't hire the technical help that they really need
The "Back End" programming and operations management that teachers and students need doesn't get done in most school districts
Another Practical Whammy of Free Camtasia™ Studio for Every ComputerImagine if every teacher and every student had the ability to create desktop video and store their creations. Disk storage is "cheap" now days, but video file sizes are large.
Would school districts have the funds to hire staff to manage student accounts, build individual accounts and "home directories" for students to store and retrieve their video creations, and provide a method that teachers could access (and grade) the work of their students?
SidebarIf the goal of our schools is student learning, and if multimedia presentations (such as student-created video) are learning tools; then the work that students create is "mission critical."Anything that is "mission critical" needs to be funded, stored, protected and retrieved on demand.
But, school districts seldom honor student work at a mission critical level because doing so is too expensive.
Making the decision to support students' academic files (including desktop video) is not an issue solved by free and no-cost licenses. Honoring and preserving student creations involves large expenditures in network upgrades, huge expenditures in technical personal, and humongous expenditures in hardware.The cost of software licenses is trivial compared to the total cost of protecting student work by a storage and retrieval infrastructure.
In the words of the season from the "free-software-wise-pound-foolish penny pinchers," "Mission critical student creations and demonstrations of learning, knowledge sharing infrastructure…Bah, Humbug!Another Great Software that Can't Work in our SchoolsNuance™ makes another software product that, like no-cost license Open Source, "won't fly" in our schools. The product is Dragon Naturally Speaking™. This software allows computer users to speak into a microphone that is attached to the computer, or to import speech from a handheld device. The software then, in theory, converts this speech to text.
Imagine if you could type as fast as you can talk. That is the marketing promise.
But, wait! What's the catch.
For one thing, the software needs to be "trained." (Although the newest version of this software is supposed to not need training.) But there is still a catch, the software learns the individual speech of its user.
So, would the district need a separate Dragon Naturally Speaking™ license for every student, a network log in and network storage for every student to store their sound profiles and text files, and the ability to access these files from every computer on campus.
SidebarWhat would happen if students needed to sit at exactly the same computer in the library or lab, and another student was using that computer? Loss of productive learning time…What would happen in a 22-student classroom if every student had to use the same computer to use the Dragon Naturally Speaking software? Logistical conflict for the teacher…Besides, the microphones that work with this program are sensitive (and fragile).And, what happens in a lab (or the in a classroom when other students are studying, focusing) and one student is reciting with a loud voice into the microphone? Bedlam…Multiple students in a lab would have other students recitations entering the microphone that they were using. Resulting in garble in, garbage out. How productive is that?The idea is great, but the logistics and management prove unworkable.
The net result: Only Special Education students with an Individual Education Plan (IEP) that requires speech to text software will get the attention and unique treatment that is required (at increased district expense) to use this software.
Dragon Naturally Speaking™—great idea, wrong venue. Issues that IT Department staff understand. The same types of issues that plague the unfettered use of license-free Open Source software, too.
In the case of speech to text, the school district would find it more cost effective to hire a pool of stenographers and typists for students than to implement a large-scale project using a scheme like Dragon Naturally Speaking™

Posted by Classroom Toolkit Newsletter in Open Source at 01:00

Wednesday, October 31. 2007

Open Source for Education

Open Source Solutions: Real Technology Integration, But Can you Use it in your Classroom?
Open Source for teachers is a lot more than downloadable, installable-on-the-desktop programs.But, can you use them? Sure, you can use anything you want at home, on computers that you pay for.
And, in most cases, you will choose a computer that runs Microsoft™'s Windows operating system.SidebarYes, there are lots of Open Source software programs for Windows™. In fact, more Open Source software is developed for Microsoft™ Windows than for any other operating system.Even more, most Open Source development is done using the Microsoft™ desktop development environment, even if the software will be used on Linux.The question is not whether these programs exist, but whether teachers can use them to "integrate technology" in their classrooms.
The Open Source desktop programs may be useful at home, but in many school districts, teachers do not have permission to install software. The reasons for this reasonable IT Department survival policy include:School district IT Departments are concerned with software piracy, incompatibility with the desktop computer and the network, and with asset management (i.e., maintaining an inventory of what the district may legally install)
Untested software may conflict with other application programs, and the IT Department staff seldom has the workforce to test new software
Unnecessary service calls (to repair desktop computer configurations, remove Spyware, Nuisance war and viruses) place an additional, undue load on understaffed IT Department
Recovering user data (documents, test scores, files that the user failed to back up) places undue strain on the already overstressed IT Staff, often at the most inopportune timesSo, what is the Gung-Ho Tech-Savy Teacher to do?Options for using Open Source programs with students include:
Use Live CDs and Live USB Drives"Pros" for this strategy include:These CDs and USB drives use a complete operating system and application platform that is "self-contained" on the CD or USB drive. A Linux system can run on the system without installing anything on the hard drive of the desktop computer. To use such a "Live CD or USB drive" you simply reboot the computer. (Of course, the computer must support booting from the CD or USB drive. You might find this ability turned off by the district's IT Department staff to prevent just such a security problem.))"Cons" for this strategy include: The strategy is limited to what ever package will fit on a single drive storage unit
The district's IT Department can disable the ability to boot from CDs or USB drives for security purposes
Setting up and customizing these CDs and USB disks is highly technical, and generally not a focus of classroom teaching; i.e., teachers are too busy with instructional tasks to fiddle with the complicated and complex technical issues of making one of these CDs or USB drives work with the programs that they want
These CDs and USB drives run the Linux operating system, and most of the programs that teachers would like to use are Microsoft™ Windows applications
These Live CDs and Live USB drives may not be able to access the resources that are needed on the district's network. Access to district network resources generally requires authentication (entering a password on a computer that the network servers recognize as being trustworthy. Network servers are seldom configured to trust live CDs that teachers (or students) bring from home
The network resources that the teacher wishes to use may be incompatible with the Linux applications on the Live CD or USB drive
Launching an unauthorized operating system on the district's network may set off network security alarms and bring a panicked and/ or irate technology staff member to the door of the teacher's classroom, or to the door of the campus principal. Obtain permission before trying to run one of these live CDs or Live USB drives on a school district networkBeg the IT Department to set up the software and customize the desktop for the teacher's use"Pros" include:Great if you get this done once, but how many time a year will you ask for this favor?
"Cons" include:Good luck in getting the IT Department staff to go to this much extra trouble (unless, of course, you are married to the superintendent
The cost to the IT Department for this "desktop customization" is from $18 to $45 per hour. The work of IT staff is not free like the software that you are asking them to installRun Applications Online
"Pros" include:None of the problems with the strategies listed above"Cons" include:The online applications are not as "robust" as the applications that are installed on a desktop computer. This may be a reason that Microsoft™ has not pursued the marketing of online applications. (Or, it could be that Microsoft™ is making so much money as the market leader, with no real competition, that they don't want to bother
You might have to obtain district permission to place anything online. This could include items that you write or use for your classroom, even if it is placed on servers or with services that are outside your district
The district that you work for may claim that the materials that you place online belong to them

The district's Content Filter might block your applications or resources, and you might have to submit a request to get these applications or resources unblocked(Note: a Content Filter is the automated strategy that is used to protect students from detrimental content that can be found on the Internet. Examples of "detrimental" content include: pornography, profanity, hate-mongering, bomb-making, terrorist recruitment, gambling, slave-trading and the trafficking in human beings or human body parts, racism, anarchy advocacy, etc. Don't worry, you are not interested in these topics, either. If you are, your employer has good cause to fire you.)Purchase your Own Computer and Bring it to Your ClassroomPros include:
You can install what you want on the computer if you own itCons include:The Internet will be off limits to this computer
It is your money. You pay for damages
If you want to print, you may need to purchase your own printer for classroom use, too
Your purchase is not tax deductible
Poor building security could mean that the computer "disappears" overnight
You may still have to obtain permission to bring your own computer to your classroom
The computer probably came with Microsoft™ Windows, and you are wasting your money if you wipe the operating system off the computer and install Linux, instead. Buy a computer without an operating system if you really want to use LinuxThe Wrong Venue: The Wrong ManagementIf prospects for using Open Source software in your classroom seem bleak, understand that the problem does not reside with you.
You work for an organization that does not have the resources to manage technology integration, nor the staff that knows how to pull this off.
This leaves you to scramble and connive to get done what you can.
But, because the Open Source folks created software applications without a thought for instructional applications, you have a difficult time documenting to your school district's IT Department that the use that you have for a customized desktop computer with specialized software applications is directly connected to instructional and learning outcomes.The challenge is uphill. With all that you are required to do, this may not be a battle that you choose to join.

Posted by Classroom Toolkit Newsletter in Open Source at 01:00

Sunday, September 30. 2007

Open Source for Education

Adopting Linux in our Schools: A Useless DebateA heated debate ensues whenever technology advocates attempt to convince school district folks, especially teachers, to switch to the Linux operating system.The problem is that teachers and students don't care what operating system they are using. They just need to get their work done.Sidebar(Note: Even in the Indiana Project, often touted as an Open Source success, Linux is never mentioned to teachers. The focus in teacher training and professional development is always on instruction and learning outcomes.)Link to information on Open Source in Indiana SchoolsIndiana's Open Source ExperimentHere is the problem: Linux advocates see the Linux adoption issue as a technology issue, when, in fact, adopting any major program in our schools is an educational and instructional issue. If this was not an educational and instructional issue, why would anyone in our schools be engaging in the conversation?Misperception of the IssuePeople who see the problem wrong (i.e., Linux advocates) will never be able to develop or propose a workable educational solution until they see that only educational and instructional problems need to be solved.
Most of these Linux advocate folks are computer professionals, not educators, and they focus upon software specifications for their evaluation. But, it is their zeal for the demise of the Windows™ operating system that really tarnishes the wisdom of their "recommendations."The Only Reason to Choose an Operating SystemApplications, not operating systems are important to teachers and students. Standard industry practice steps…Identify the instructional goals
Research direct connections between goals and applications
Test applications to determine suitability to meeting the educational and instructional targets
Determine what Operating system the applications run on
Examine Budget
Determine Support Staffing Needs
Allocate 305 of the project Budget for Professional Development
Allocate 10% of the budget for instructional outcome testing
Obtain buy-in from all project stakeholders
Implement the project with teachers in advise and consent roles at every phaseAnd, in a school setting, applications must be compatible with everything else because technical support staff are not available to manage compatibility issues.
More than Desktops and Servers
School districts require more than separate and individual desktop computers and Web servers.
School districts need integrated networks with 100% compatible components. This is referred to as "Enterprise Computing." Few of the Linux advocates take this into account.SidebarThe isolated desktop computers, and even the one-use word processing labs that Linux advocates recommend fall short of a school district's needs.
And even the much touted Indiana Project, referenced above, only provides one Language Arts lab per small high school, for the sole purpose of writing research papers.Even at that, no research data shows that student writing performance outcomes clearly benefit from the use of word processing computers in a lab setting.In fact, consistent research shows that it is the teacher, not equipment or software that is the independent variable with predictive validity that motivates improvements in student learning. The difference between individual desktop computers and an integrated and large-scale network of computers is easy to understand. Just look at the school cafeteria that is feeding 700 to 1,000 (or more) students in 1 1/2 hours; and compare that operation to your kitchen at home.It is plain that different (and larger) equipment is needed, even if that equipment does the same thing as the equipment in your home. The distribution channels also must ramp up, and the cleanup must be industrial strength.In the same way, the computer network and its components must be up to the task.
SidebarIn fact, the computers that are sold to schools are a heavier grade (business desktop) than most people use at home. School district computers are tougher and built with more expensive parts.This is similar to purchasing a pick up truck for moving light loads once in a while, and purchasing one the is going to tow fully loaded, heavy boats on trailers over long distances.Playing Nice: Interoperability in our Schools There is one Linux solution that can handle the end-to-end needs of a school district. But, Linux advocates seldom recommend this solution because it is a commercial solution. However, only a commercial company that examines school district needs and tailors its products to those needs can really compete at the enterprise level. In addition, it takes a company with a lot of resources to build a technical support staff that is available when school districts need help.There also is a standard that ensures that software products play nice with each other. This is called the Schools Interoperability Framework (SIF). But, it is expensive to meet these standards.There is one enterprise-level Linux version that is also SIF compliant.
So, why don't Linux advocates advocate that schools move to an enterprise-level Linux operating system (and, in fact, all Linux applications) meet the Schools Interoperability Framework (SIF) requirements?SidebarThis would ensure that

data that was created in one application, say a library automation system, could be used without having to export the data from one application and import that data into the other application.It is easy for teachers to see this problem, re-keying data wastes time, and, every time you want to update, you have to rev up the "export and import" cycle…again and again.One Technical Tune, Limited AudienceUntil Open Source advocates understand that they need to view Linux adoption as an educational solution (not a technological one), and deliver enterprise-level, not desktop level integration, the Linux movement will continue to stall in our schools.
SidebarNote: This movement is different than the Open Source Movement where teacher use lots of Windows™ software that comes without license fees.When teachers think of Open Source software, if they think of it at all, they think of Windows™ software that they can download and run on their home computers.Many school district computers are "locked down," and teachers and students are not allowed to install software.
This requirement is not because the school district's IT Department wants to exercise draconian control, but because school district can be fined and can be forced to pay for pirated software that district employees or students install. Besides, untested software can crash computers, and put additional strain on already-under staffed IT Departments.Working ConditionsLinux advocates also need to understand the on-the-job working environment, and the at-home working requirements of teachers.They must understand that teachers do most of their planning and grading work at home. In addition, they must understand that schools use many specialized software beyond basic word processing. For example, schools require an operating system that will run software for…Textbook add-on and instructional aids
Electronic microscopes, programmable calculators and science lab probes
Library automation systems
Textbook tracking
Food service Point of Sale (POS)
Transportation planning and tracking
Reporting to state and federal agenciesIt is naive to think only in terms of desktop solutions for our schools.
Linux needs to have instructional and management applications that perform all the tasks that are needed by school staff and teachers.Application software must also deliver seamless integration with Microsoft's active directory so that students can benefit from…Home Directories (with home and school access)
One account access to all network services
Online portfolios, with teacher access to all student files
Safe browsing and a filtered Internet experienceOr, the Linux enterprise network system must have an equivalent directory system of its own.An enterprise Linux system (Novell™) meets these requirements, but Linux advocates seldom recommend it.If a Linux Solution for Schools Exists: Why do Linux Zealots Ignore it?It is amazing that Novell™ has done its homework, and has developed an enterprise solution that is SIF Compliant, scalable and interoperable,,,yet Open Source advocates continue to push Linux in all its un standardized, desktop (not enterprise-level) "distros."SidebarNote: a "distro" is a distribution. This is a customization of the Linux operating system. Unfortunately, one "distro" is not fully compatible with another "distro."Actually, another commercial Linux system is in operation, this one is called Xandros™. Although Xandros™ lacks the extensive educational customizations that Novell™ offers, it is easy to use and contains smart server components that configure and connect to each other.Customized and Distinct "Distros:" Strain on IT StaffSchool districts under staff their technology support departments.
Most often, school district IT Department staffing is at levels that are 1/3 to 1/2 what is reasonable (and necessary). School district IT Departments don't have the staff that is required to manage their networks and provide the Service Level Agreements (SLAs) [guarantees of uptime and service availability] required to convince teachers that everything will be working when teachers need it to be working, i.e., every class period. Repairs need to be complete in minutes and hours, not days and weeks, before teachers gain trust in the technology.
Installation and management of incompatible (and untested) network components would stretch the capacity of beyond its already limited ability to deliver support.Making an Educational Case out of ITThere are two areas where Linux advocates should know better, but don't seem to know enough about education to communicate effectively with teachers…Every school district initiative requires an educational case justification (like a business case). It is not enough to communicate computer program specifications. In fact, these specifications only become relevant in the conversation of, "Here is the direct connection to measurable student outcomes, and this is the way that these specifications apply to the educational task."
Applications, not operating systems, should be the basis for making technology choices, and only when research validates the direct connection of these applications to improved instructionAnimosity Against Microsoft™More Open Source software is available for the Windows™ operating system than for Linux, so why are so many Linux advocates against Microsoft™'s products? Instead, Linux advocates might be more effective in getting school district staff to consider limited Linux components by promoting Windows™ versions of Open Source software...as long as file formats of the application programs are completely (100%) compatible.
Another way that Linux advocates might be successful in introducing Linux components into a school district network would be to build and deliver education-specific applications that produce measurable student achievement (i.e., increase test scores).SummaryUntil the Linux advocates get into our schools, find out what makes teachers' jobs easier,

produce research-based instructional applications, and make teachers the gatekeepers of every Open Source project; Linux in our schools is doomed to failure, just like the "Technology Integration Movement."
Linux advocates should study what Novell™ has done to customize Linux, and to .
Better yet, Linux advocates they should just stop debating technology and discuss education. They would get much farther advocating school district adoption of Novell™'s enterprise solutions instead of isolated Linux desktop solutions for one-purpose lab installations.
Discussing education, not technology would go a long way in actually promoting a viable instructional improvement process that includes Open Source applications.
Linux advocates should keep the "techie talk" to themselves. They should learn to think like teachers and learn to talk "teacher talk" if they really want to get Linux adopted in our schools. Until then, Linux advocates will continue to be perceived by teachers as "geeks who talk a some strange code."

Posted by Classroom Toolkit Newsletter in Open Source at 01:00

Friday, August 31. 2007

Open Source for Education

Open Source for Education: Last ArticleThe Open Source for Education section of the Classroom Toolkit Newsletter has reached its "end of life" stage.This is the last article in this series.
Open Source for Education will be replaced by a new article series, on "Professional Self-Improvement.""Open Source for Education: High Value, Low InterestOpen Source for Education provides a high potential value for teachers, but there does not seem to be adequate interest for Classroom Toolkit to continue devoting the time in creating world-class newsletter articles. Instead, the topic will be relegated to our Blog when items of interest develop.Saga of a Marketing Research PlanWe have been conducting marketing research for a Texas-based organization that we belong to, Strategic Open Source. This is a special interest group of the Texas Computer Educators Association (TCEA).
This group has experienced difficulty in expanding its membership base, and in "getting behind the need of marketing Open Source solutions to teachers." I pressed the group to begin a marketing campaign, but I was assigned to conduct the marketing research and report at a subsequent meeting.SidebarThis seems to be an issue of "Techie-Type" folks thinking that they know what teachers need.Of course, educational research shows that instruction is the focus of teachers' needs, and that technology should be transparent, i.e., invisible to the teacher.The reason that the Texas organization hasn't developed a marketing plan to reach teachers is that many members seem to cling to the idea that Open Source is a "Technology" issue.That research leads me to believe that…Teachers don't care if products are Open Source, or not
There is not enough teacher interest to warrant a separate article each month
Teachers are concerned about instruction, not technology, and teachers don't care what company provides software, as long as the software is easy to use and solves their biggest headaches
The Open Source movement of Classroom Toolkit is about freely available content, not softwareOnline Research
I completed some research before changing the focus of this section of our newsletter. What I found was that almost no one searches for Open Source software for Instruction .
Classroom Toolkit always supported the use of Open Source tools for Microsoft™ Windows to create modular (and interchangeable) learning materials. This would…Streamline teacher lesson planning and save time
Shortcut the search for instructional activities, and save more time
Provide a vehicle to train students in the use of visual learning components such as Graphics OrganizersImplications for TeachersI created a Website presentation to communicate marketing principles to the Texas organization.
SidebarI didn't share the Website presentation because I realized that the marketing materials that I created were even better suited as a tutorial for teachers in using marketing strategies to increase students' motivation.For a preview of what these instructions look like before they are converted to a teacher-centric format, visit…Open Source Marketing Checklist
The basic tenets of marketing seem to be exactly what Master Teachers do as they get to know their students, and as they communicate in ways that make students eager to buy-in (learn) each lesson's content.
Eager to learn students are excited by teachers who implement the same principles as marketers.
Master Teachers are master marketers of the curriculum that they teach.

Posted by Classroom Toolkit Newsletter in Open Source at 03:00

Tuesday, July 31. 2007

Open Source for Education

The Open Source Playbook: School District Marketing Strategies for Failure...
Open Source Solutions present great opportunities for teachers and students. Open Source benefits include teaching and learning tools, measurable teacher and student progress accelerators and strategies that focus upon instructional improvement targets.But, Open Source advocates most often market "backwards," and that is the reason that, compared to the potential for "close to universal impact" in our school districts, the implementation of Open Source trails and our Open Source marketing proves a "dismal failure."Do the MathHere is the math...
The percentage of school districts that could benefit from an Open Source initiative: Let's agree on a conservative number, say 80%. (Note: of course we all know that the number is probably way over 90%, but let's accept a lower number for the sake of this illustration.)
The percentage of school districts with a functioning and vital Open Source initiative: Let's agree on a extra generous 10%. (Note: of course we know that the number is probably lower, but let's accept this higher number for the sake of easy math.
The difference, i.e., 80% - 10% or 70% equals the market share that Open Source is missing. This is a "market gap," and demonstrates a marketing flop.
But, let's consider the numbers for the sake of the folks that think that Open Source is making headway in our schools. If we could raise the estimate of the number of schools that are benefiting from current Open Source initiatives to 20%, we would still have a market gap of 60%.
But, we can't lower the 80% estimate of school districts that would benefit from Open Source Solutions because that would be saying that many more school districts don't need Open Source Solutions. Accepting such a premise, although in the realm of logical possibilities, is a marketing "No No." Accepting such a premise is also marketing suicide.Open Source Marketing Faux PasSo, what is the marketing faux pas rampant in Open Source circles?
Open Source markets backwards by developing a product first, then setting out to find customers.
Worse, some advocates take products that were built for other industries, and try to get customers to change to fit the product. (Note: If this approach were a horse, it would not even rise to the level of a "long shot;" but, it would be shot because it is lame, with no hope of recovery.)
The correct marketing approach, and the only one that works, is to discover what customers want and deliver that solution to them with an overwhelming offer of benefits.Divining what Customers NeedA second marketing faux pas is to build a product that customers "need."
How can this be bad?
The reason that building a product that customers need fails is that customers may not agree with your assessment of their needs. The only results-producing solution is to build what customers "want."
For example, an Open Source advocate believes that teachers need Open Office™ instead of Microsoft™ Office. Or, maybe teachers need FreeMind™ instead of Kidspiration™ or Inspiration™. Or, maybe the Webmastering teacher needs nVu™ instead of DreamWeaver™.
Let's listen in to the self-talk of teachers who hear this kind of marketing campaign.
"Hmm. Open Office has minor compatibility issues, we have Microsoft™) Office at home, and my significant other needs Microsoft™ Office for bring-home, after-hours work. Why deal with the hassle of a second program that introduces complexity into my life...especially when Microsoft™ sells the product to schools at one-tenth of the real price.
And, why would anyone propose Freemind™ instead of Kidspiration™ or Inspiration™? Don't they know that the object of the software is for students to think and for students to visualize relationships? Having to creating from scratch what is built into Kidspiration™ and Inspiration™ wouldn't be worth the hassle, even if the FreeMind™ program was just as easy to use. Then again, FreeMind™ lacks all the instruction-specific templates that drive instruction and student thinking.
And, who in their right mind would teach students Webmastering with nVu™? Nobody who wants their graduates to be competitive in the job market, anyway. Any company that hires our graduates expects their new employees to know DreamWeaver™, even if the company uses a content management system. Our graduates would be laughed out of the company's waiting room, even before they reached the interview, which if their resume lacks mention of familiarity with DreamWeaver™ would never produce the invitation call."
It is a "costly and fatal" marketing mistake to assume that we have a product that customers "need."What's in it for Me?Instead, marketers must build a product that customers "want."
The final Open Source marketing faux pas is that the "What's in it for me?" question goes unanswered?
What is in it for teachers who adopt Open Source Solutions?
What is in it for students who adopt Open Source Solutions?

We have to spell out these benefits as "irrefutable evidence" for our marketing to be effective.
Where is our "irrefutable evidence?" Where are our success stories? Where are our testimonials? Where are real, "in the trenches" people saying how Open Source products improved their lives, saved their marriages, got them a promotion, kept them from getting fired, made them campus heroes?Real-World Open Source NeedsThis means that the Open Source products must be something that teachers and students want. Something that provides tangible, countable, measurable, feel-good-about-it benefits.
An Open Source Solution cannot be just a download (or a CD full) of Open Source software.
The solution must overflow with "real-world, solve our most pressing problems with one click, today, one-of-a kind, can't get this anywhere else" customizations that make teachers' and students' jobs easier and that make the jobs of teaching and learning tremendously more effective.
The Open Source Solution must also make gathering the results of teachers' and students' improvements easy to collect, easy to display, easy to share...so that we can use those success stories in our future marketing.
Open Source advocates must become Open Source marketers instead of "techie do good. software gurus." The sooner that the focus shifts from Open Source products, to Open Source Solutions, the sooner that we quit focusing on how to convince teachers that they need Open Source solutions; the sooner that we begin to develop solutions that take Open Source Solutions to the "next level."Ground Zero Starting PointWhere do we start?
First, let's pick an issue that focuses upon teachers' greatest gripes, stresses and pain.
Next, let's tailor an Open Source Solution that solves that issue in a way that does not require a lot of teacher time, effort, expertise, techie skills or commitment.Let's make sure that our product is compatible with existing solutions, inter operable, manageable and scalable. Let's also make sure that our solution contains the requisite professional development and follow-up support.
Once we have a solution that we can market, we can build a viral campaign and our product will spread world-wide in a matter of days.Measuring Marketing SuccessWhat is our "success-measures" target?
Do we want hundreds of thousands of teachers and students to clamor for and grab our product solution each week?
The answer to this question is not what we say. The answer is what others see us do.
If we focus on what teachers and students want, and deliver a solution that satisfies that want, then we mean business...and we are sailing toward safe-harbor success.
If we decide ahead of time that we know that teachers and students need our solution, and we simply repackage "off the shelf" compilations of Open Source software; then we are steaming headlong into turbulent waters, with windless sails...and our destination is a castaway desert isle.
The choice is ours.
Do we have the wherewithal and the insight to tailor our solutions for teachers' and students' wants? Or, will we "shoot ourselves in the foot" and insist that we know (better than they do) what they need?
Excuse the double entendre, but the answer to both questions seems like a "no-brainer."

Posted by Classroom Toolkit Newsletter in Open Source at 03:00

Saturday, June 30. 2007

Open Source for Education

Teachers to IT Departments: You have Professional Development Homework
One of the reasons that the Technology Integration movement failed to provide a Return on Investment(ROI) commensurate with the huge amounts of money that was spent is that adequate professional development of the right kind was seldom funded or delivered.Many reasons contribute to this history of limited results from massive expendituresSidebarMost educational technology advocates (Ed Techies) argue that not enough funds were devoted to technology. This is correct.However, the mistake was in allocation, and in failing to develop a viable funding model.Here is how the budget actually looked:
80% Boxes and Wires15% Technical Staff5% Training and Professional DevelopmentHere is what the budget should have looked like…
30% Professional Development10% Back End Processes30% Technical Staff30% Boxes and WiresAn even better budget model…
35% Professional Development05% In Class Follow-Up Support30% Technical Staff10% Back End Processes20% Boxes and WiresWhat we can see from this budget picture is that way too much equipment, software, wires and infrastructure was purchased before teachers and students were trained to use the equipment for instruction. Much more money needed to be spent on back end services and management support, and much more money needed to be spent on technical support (so that the equipment functioned properly).
Can't you hear the technology folks complain? "But, if we had spent the money on all these other things, we would have purchased only one quarter of the equipment that we purchased, teachers and kids wouldn't have had access to technology."
But if you have a car but no money for gas, and you can't buy new tires because you lack funds, do you have reliable transportation?
In the same way, if you have computers but…Fail to provide training and professional development on how to use the computersFail to provide release time and compensation for after-hours sessions
Fail to ensure that there are enough technicians to ensure that the equipment is operational…
you retrieve only a fraction of your investment in the equipment.Key Indicators for Professional Development
Leadership
This leadership must cascade from the highest altitudes of the school district, in an unbroken chain, down to to the lowly swamps and bogs where campus leadership resides
Leaders at all levels must take the "heat" and say just how much money "doing Technology Integration right" will cost
Funding
"Tremendous amounts of money will be required
The amounts of money are not for the "faint of heart"
The amounts of money are too large for the "mathematically challenged" to count to on their fingers
School leaders should adopt the motto of the slick, jewelry store sales person, "if you have to ask how much it costs, you can't afford it."
In answer to the politicians who gripe about the billions that were already wasted, a real leader says, "The billions that we spend already is 'chump change' compared to the amount that was needed. You received so little in return because you appropriated a miniscule amount of the required funding."
Resources: The resources needed also include…People, teaches, trainers, substitutes
The "Train the Trainer," on-the-cheap model will never "cut it"
Time to implement: It takes three or more years before teacher can retool their patterns of instructional delivery
Practice Time: Needed for both teachers and students
Time to learn: release time and paid compensation for any after school training
Perhaps the technology integration movement will be the crucial political mistake that moves teachers to "non-exempt" overtime status. This means that teacher should collect overtime, and at some point in the future, teachers will demand that right
Equipment: Hardware and Software
Teachers who are not paid to stay after school, should expect that the school district provide equipment and software for their home use
Students should be provided software to take home, too
Training is for software, but training does not count as professional development
Teachers require focused professional development, targeting actual curriculum/ subject matter that they teach and conducted by trainers who have actually used those methods with real age-appropriate students
If the bean counters complain, "But, this will require an small army of training staff, and shoot our costs through the roof!"

Reply, absolutely.
Anything less than professional development by real teachers who actually applied what they present in the real-world arena of a classroom in front of students fails to rise to the level of "professional development"
Follow-Up:
Either follow-up personally, provide online interaction for follow-up, or watch your investment in training and professional development "wither on the vine"
"One off" training have little in common with professional development needs
Professional development without personalized follow-up fails to recoup any of the investment
"One Off" training is like giving folks a single golfing lesson, and expecting them to hit the links regularly, consistently improving their score. Comment: "Fat chance!"
Focus on Instruction
"Software only" training seldom generalizes to consistent application in classroom instruction
Software training may increase teachers' personal productivity, if, they have the software in their classrooms and they have the software at home. "If not, tough luck to whoever paid for the training," they've wasted their money!
Benefit to Students
With minimal access to equipment and teacher less than knowledgeable about how to use the equipment, student use withers and wilts. Why buy equipment until it can be used?
Equipment that is purchased with an "If we build it, they will come" attitude proves to be partially correct. We build the labs, but students will use them to play games, send personal E-mail, defeat the content filters and access pornography, and end up infecting the computers with "Spyware" and Trojan-type viruses
Virus makers and hackers love to infect school district computers because the computers run all night on high-speed networks with no one watching them. School districts that fail to hire appropriate (high-priced experts) security staff seem to be responsible for sending a major portion of the Spam that we all receive
Change of Teaching Style
The Integration of Technology requires a "whole 'nuther teaching style
Teachers know, but don't confront their supervisors with the truth that it takes time to build new habits of instructional delivery and new habits of classroom management
Teachers need practice time, and time to perfect new skills
Teachers need coaches who are master teachers, not techies who know how to use a computer, but who "washed out in the classroom"
Teachers can't just listen to some instructions, read a handout, and be expected to apply complex changes that require different attitudes, knowledge and skills
Trainers who have Applied what they Teach are next to useless
Inform school district decision-makers that they squandered district money on trainers that teachers easily "saw through"
Teachers may be too polite to tell trainers that they are "all wet" and don't know what they are talking about, or, maybe they had a difficult day and were forced to attend an after-school session, and they were less than polite
We've said it before…trainers only earn standing with teachers by delivering Integrated Lessons in front of students. "No real track record, no credibility with teachers"
Empowerment
Empowerment is mandatory for both teachers and studentsDiscussion on Professional DevelopmentI posted comments on a discussion page at the Classroom 2.0 site, asking for ideas.
My first reminder was that "top to bottom" school district leadership is crucial for any professional development initiative.
To look in on the rest of this discussion, follow this link…
Link to further professional development discussion on Classroom 2.0

Posted by Classroom Toolkit Newsletter in Open Source at 03:00

Thursday, May 31. 2007

Open Source for Education

Teachers to IT Departments: You have Network and Back-End Programming HomeworkIt is an ethical question. When teachers know that students can't (or won't) complete homework assignments, should teachers "pile" the homework on anyway?A similar issue exists where school district's Instructional/ Information Technology (IT) Department is concerned.
Is it ethical for teachers to assign homework to the school district's IT Department when they know that the department can't (or won't) complete the homework?"King of the Hill" or Self Preservation?Sometimes school district departments, such as the IT Department, play the child's game, "King of the Hill." In this brinkmanship/ brinkswomanship scenario, one player attempts to gain and hold a position of dominance.
Of course it is "stupid" and self-defeating for IT Departments to play this game because the school district's mission (i.e., teaching children),SidebarUnfortunately, this "King of the Hill" game is often also played (ruthlessly and powerfully) by the school district's Business Office staff, with predictable, loss of benefits to the district's students.
Sometimes this game is played by the school district's superintendent and school board. Ditto for the negative impact that trickles down (or for the needed benefits that fail to trickle down) to the district's students.
Why won't the IT Department do its Homework?In other cases, the IT Department works as a team, understands instruction, knows the needs of the students; but cannot deliver.
In most of these cases, either…The IT Department is loosing the "King of the Hill" game to another department
The IT Department is under funded and under staffed and cannot deliver
The school district is not prepared to spend as much money as it will take to do the "IT Job" right
Human nature trumps good sense, i.e., some of the technical work that is required can only be completed by engineering professionals who easily earn more than school district superintendentsTypes of HomeworkProfessional Development
Elimination of Labs
Integration of Back-End ProcessesStudent Records
Attendance
Parent Communication
Meaningful Test Result Interpretation
Access to Students' Online Portfolios
Access to District Network Assets from HomeIntegration of Data Collection
Data Warehousing
Multi-Level Client Resource Management (CRM)
Infrastructure Repair and Automation
Membership in the Schools Interoperability Framework (SIF) Initiative
Etc.Is all this Possible?All this is possible if a school district is committed to the Integration of Technology. Of course, all this is expensive, very expensive.
But, what is better, 1.) spend the money, hire the staff, purchase the equipment and develop and upgrade teacher's skills over a period of three years; or; 2.) provide less than the minimum of these requirements and place the burden on the backs of teachers?
Which option did the school district that you work for choose?"Cheap and Free" AlternativesCan school districts create effective environments for the Integration of Technology with "cheap" and "free" software?
The answer is "Yes, but…"
The free stuff:Is a bunch of disjointed software programs that don't work together
Is not as easy to use as the commercial programs
Requires more teacher work and effort, when completing the IT Infrastructure Homework would streamline and decrease the technology work that teachers have to do
Fails to work in a transparent manner so that students and teachers focus upon the curriculum and subject-matter content instead of the technologyThe platform required to deliver the IT Infrastructure Homework does not matter.
But, the "free and cheap" arguments of some proponents leads school district administrators and school district budget managers to believe that their obligation has been fulfilled if they supply "free and cheap" technology resources instead of costly and expensive resources.
The debate over "free" and "cheap" Technology Integration solutions distracts IT Departments, keeps IT Deparements from doing their homework for teachers. Streamlining the Work of TeachersStreamlining the work of teachers so that teachers can attend more fully to students seems to be the one core value that underlies the missing IT Infrastructure Homework.
Teaching requires a complex skill set, and teachers require several years of structured help (professional development)

before they move to the level of habit and comfort where integrating technology seems to be "effortless." Useless tasks need to be eliminated from our teachers' routines.
IT Homework also should focus upon making the technology easy to use. Of course, unless the technology streamlines our teachers' workloads, easy to use translates into "busy work."Finding Funding for the HomeworkFunding a large scale program such as the Integration of Technology requires planning and a re-allocation of resources by school districts and IT Departments.
So far, school administrators and politicians seem to want to do Technology Integration "on the cheap." This forces IT Departments to "skimp and save," but also pressures IT Department staff to pressure teachers into doing on their own, what network administrators, technicians, trainers, programmers and engineers should have done for those teachers.
However, real funding, almost unlimited amounts of funding would have been possible if school district IT Departments had focused all IT expenditure on instruction, if instruction (rather than building technology infrastructure) were the IT goal. If school district IT Departments focused upon measuring the direct connection between providing the technology and student achievement.
Focusing on instruction and the needs of students and teachers…this is the missing assignment.
Another missing component of the IT Infrastructure Homework is that the IT Folks locked on to the words "infrastructure." Words like "student outcomes, student achievement, driving instruction, teaching and learning first and foremost" seem to have been relegated to the backseat (maybe the trunk) of the Technology Integration vehicle.
Asking the Right Questions
IT Infrastructure went astray by asking technology questions. Instead, the questions should have been instructional. For example, questions like…What support do we need to provide to teachers?
What resources do we have to provide?
How long will it take to get teachers up to speed with the new
procedures, processes and changes to their teaching styles?Instead of placing the blame upon teachers because Technology Integration efforts languish, we should ask school district IT Departments what homework was left undone.
The job of IT Departments is to figure out what tools and skills teachers need to deliver and manage instructions.
The answer that these IT Department come up with only starts when hardware, software,
professional development, release time and collaboration time are made available to
teachers…in a streamlined and easy to use way.
Once these minimum requirements are in place, then IT Departments can begin their homework of developing the systems that teachers can use to deliver instruction.Who is at Fault?It seems logical that any stakeholder that assumes that technology alone provides a solution to Integrating Technology into instruction is at fault. By not understanding what the educational case for the use of technology is, these stakeholders missed the train, and left a lot of expensive freight (un used and under used hardware, software and network capacity) on sidings and in rail yards.
In my view, our efforts at Technology Integration are similar to going into some isolated rain forest and giving the indigenous tribes a dozen rifles and a case of bullets, then leaving. The tribe may feast for a short time, but what happens when the bullets run out? Support for the rifles would require...Mining for lead, copper, zinc
Smelting of lead and brass
Molding the bullets, machining the shells
Mining the components of the gun powder
Creating the caps that detonate the bullets
Rifle repair machinery, Optical sight repair facility
Etc.Perhaps this is a silly example, but the question concerning IT Departments completing their homework are similar:
What do we need to provide to enable a sustainable Technology Integration effort?
What support (or maybe cottage industries) do we need to build before the Technology Integration can be successful?
How do we get participants (teachers) to break with their traditional ways of doing things and adopt the new methods?
Will teachers and students be better off?
Will teachers and students be performing at higher levels, to greater capacity, with higher quality outcomes, products and performances that we can directly measure and attribute to the technology investment?
Will our initiatives be easier and less stressful for teachers to use than traditional methods?Teachers's InterestsIT Department staff forgets that most teachers do most of their instructional development and planning work at home.
School districts are too stingy to provide the support that teachers need for equipment in their home. (Some school districts don't even supply needed support for equipment inside their districts.)
This means that IT Homework requires that everything that teachers need be made available for their use in their homes.
Teachers have little interest in servers, thin clients, or distributions. Teachers just want everything to work, to work without a lot of effort, to work without their having to engage in a steep learning curve, to work seamlessly with everything else. These expectations for support are
justified.
Teachers need help with planning, classroom management, lesson delivery, curriculum and high-stakes test survival.
Teachers need stress relief, strategies for self-improvement, and streamlined ways to keep their jobs. These are areas of homework that school district IT Departments are turning in late.

Training and Professional Development: Different Vocabularies
It is school district IT Department staff members' responsibility to learn instructional vocabulary. Teachers have only a limited need to learn IT Infrastructure vocabulary.
However, the terms "Training" and "Professional Development" need special clarification.
The IT Department calls "it" training, while teachers call "it" professional development.
Both groups talk as though the terms were synonymous. The terms do not mean the same thing.
IT Folks attend training, but teachers attend professional development. This means that one the missing IT Homework assignment is to convert every single bit of training (software training, for example), into curriculum-targeted, instruction-focused, practical and applicable professional development.
If teachers are "ordered to training," they attend out of a sense of duty or out of a need to meet professional development seat-time requirements. But, the training stands little chance of motivating teachers, and stands an even lower chance that teachers will seek follow-up learning. Teachers, like everyone else, want easy solutions, magic pills, quick fixes; but they feel free to ignore (and never apply) training session content that is not directly related to instruction.
Teachers desire solutions that fits into their (comfortable) habit patterns.
To do this, IT Department staff must do their homework and… Develop a "educational case" for the use of the technology
Develop direct measures of student outcomes based upon the use of the technology
Identify exact instructional delivery methods that research proved were the independent variables responsible for increased student learning
Deliver an easy to use, fully-functional solution that included the hardware, network resources, software, professional development, in class coaching, long term follow-up
Track teacher implementation, assess teacher skill at the delivery of those specific instructional tasks
Follow-up with teachers until the teachers "get the specified instructional delivery skills right."The lack of teacher enthusiasm for Technology Integration is easy to explain. Definitely understandable. The lack of teacher enthusiasm for Technology Integration is a realistic response to an untenable and precarious situation that teachers are left in because school district IT Departments have not done their homework.SolutionsSolutions to this Integration of Technology issue range from easy, painless, low-cost and quick to difficult, painful, expensive and long-term.
Why the huge difference in solutions?
Because school districts don't have to do anything about Integrating Technology. A Technology focus distracts school districts from their core expertise, leads school districts away from their area of expertise, requires school districts to play in an arena that is too expensive…an arena that school district officials (unanimously?) agree is beyond the means of most school districts in the financial and knowledge-of-how-to-do-it areas.
Or, school districts can commit to the Integration of Technology, re-purpose funds from every nonessential project and program, "cut the fat" out of every project and program that is essential, and beg (grants, fund-raising development), borrow (bond issues), or steal (rob from other projects and programs and let them flounder from under funding in the ways that the Integration of Technology was let flounder.)
Or, school districts can commit to what they say they are doing to Integrate Technology and actually do their IT Homework. If the expertise does not exist in-house, then the program can be outsourced (hired out to companies that have the expertise). Solutions such as this will cost, and cost, and cost…Other Creative SolutionsThis article is posted under Open Source Solutions sectioin of the Classroom Toolkit Newsletter because moving to Open Source is one creative solution to fulfilling the needs of our school districts to Integrate Technology.
But a workable Open Source project means that school districts would share (contribute) all the proprietary content that they hoard. (Note: This solution does not mean faking a way out of the Technology Integration problem by implementing free and cheap software. This would be an Open Source of quality, usable instructional content, having nothing to do with free computer operating systems. Delivering instructional content is another school district IT Deparement's missing assignment.)
Quality instructional content is neither free or cheap, unless this content is created through a grassroots effort such as the Open Source for instructional materials started by Classroom Toolkit.Cooperative SolutionsOther, creative solutions include:Cooperatives, inter-district sharing
Open Source, instructional materials collaborative's
Large-scale foundation grants, such as the ones that the Bill and Melinda Gates Foundation supports
State-wide sharing initiativesAll these initiatives could get school district IT Departments "off the hook," and "excuse" these departments from doing their homework.
But as the politics and the rhetoric now stand…
IT Departments: "Do your homework!"

Posted by Classroom Toolkit Newsletter in Open Source at 03:00

Monday, April 30. 2007

Open Source for Education

Teachers to IT Departments: "You have Homework"
Every teacher, unless maybe a teacher who has been driven under a rock (or into deep depression) by the stress of high-stakes testing; knows that the integration of technology is important.But, do teachers know what is important about this "integration" effort?
In fact, do teachers know what the "IT" in "IT Department" stands for?Sidebar"IT" can stand for "Instructional Technology" or it can stand for "Information Technology." So, what is the difference, a name is just a name, right?On the surface, the "Instructional Technology" name would seem to hint that the department was focused upon technology that supports instruction. We wish that were so.The "Information Technology" name might indicate that the department supports the schools Business Office and focuses upon the data that is used to manage the district.Doesn't the school district's Business Office support instruction with the same goals?" you might ask. We wish that this were so.Sidebar to the SidebarInstruction and School District Business Office folks should work together, with the Business Office recognizing that school management functions occupy a subservient role in education.However, school Business Office folks seem to believe (in a grandiose way, sometimes) that they perform the "mission critical" functions of the school district. And, these folks tend to use a "passive-aggressive" approach to getting their way, i.e., choking and strangling change, innovation and personal teacher initiative by the withholding of funds. This strategy directly affects instruction in a negative way, and also affects instruction indirectly in a negative way by choking and strangling funds for technology.In practical use, "Instructional Technology" and "Information Technology" mean the same thing because…Even if leadership of these departments consists of real educators, the staff (depending how large the district is) consists of technicians, network administrators, database administrators, technical managers, project managers, programmers, systems analysts, Webmasters, graphic designers, and maybe trainers.Even if the leadership folks are real educators, they usually don't employ nearly enough of the listed staff members to do an adequate jobEven if the IT leadership consists of educators, campus administrators and curriculum administrators resist the meddling of technology folks in instructional matters affecting their little kingdomsIT Leadership and staff often are overwhelmed by fix-it work stemming from an under whelmed budget that they do not have the luxury of focusing on the needs of instruction (Note: School Business Offices are under funded, too)The IT Department should be able to offer Service Level Agreements (SLAs) that guarantee uptime for all equipmentSpheres of Influence: No Confluence of FocusThere was a push to integrate technology into instruction, a big push.
But, the politicians and corporate leaders, and the parents that want to see their graduating children as "employable" neglected to "pull" adequate funding from for technology programs from their wallets.
So, everyone involved in Instructional/ Information Technology, i.e., the IT Department and the School's Business Department are handicapped by a lack of available funds to deliver on their mandate. So, rather than cooperate for the best interest of our students, the power centers (Business Office, Curriculum Department, Campus Administrators, IT Department) jockey for position and prominence. Each sphere of influence tries to maximize its performance and maintain its survival by "doing more with not enough."
Each of these groups fails to complete the required homework, i.e., talk to teachers and understand the educational case for their existence. But, the focus of this article is upon what the IT Departments needed to have done, but didn't do.Missing Assignment #1Missing Assignment #1: Show the Direct, Irrefutable Connection between Technology and Student Learning Outcomes
Technology integration advocates went astray by failing to provide measurable, student achievement outcomes as part of technology integration planning. The early conversations by the technology folks went something like this…
"If only those (fill in your own derogatory adjective) teachers would integrate the technology that we have given them, then our students would benefit.""We can't point to the direct connection between technology and learning, but we know that that connection is important to our students' future job prospects.""The benefits to students are down a future road, and we can't measure those benefits now. It will take a long time before we get that data."Here is the problem. These Techie folks needed to go into classrooms and find out what teachers do and find out how teachers do what they do. These Techie folks needed to observe students who were actually learning and find out what learning students do and how they do that learning.
SidebarOf course the Techie folks didn't go into the classrooms because…The campus administrators and curriculum folks wouldn't let them inThe teachers didn't trust them because they spoke a different languageThe Techie folks were too busy fixing equipment and too busy keeping up with service requests to go into classrooms to observe learningEveryone knew that finding out what the technology needs of teachers and students actually are, then delivering strategies and services that solved those needs would be too expensive to carry out, anywaySo, the Techie folks delivered as much equipment as they could afford, set standards for equipment, and allowed campus administrators, grant agency targets and state curriculum pushes to drive IT Department efforts.Missing Assignment #2Missing

Assignment #2: Obtain Requirements and Specifications from Educators
If IT Department leaders had been able to speak the same language as teachers, and if they had completed Assignment #1, they would find themselves face-to-face with Assignment #2. (Of course, few ever made it this far.)
Of course the IT folks didn't want to face Assignment #2 because in doing so, they would have to give up some of the precious little authority that they scrapped and grappled for.
To complete Assignment #2, Techie folks would have to quit prescribing technology (hardware, software, infrastructure) and build to the requirements and specifications that teachers provided.
it would have been a wise, and rare IT leader that said…
"IT has no business prescribing technology for instruction. Provide us (IT) with:The educational case for your program
The requirements for the project based upon
The exact student outcomes that the technology targetsWhat the students will actually need to do?
How much access time each student will need to produce measurable gains?
How will the students actually do what they need to do?
When will the students actually do this?
How many students will need to be doing these things (be provided this access) at the same time?
How will we actually measure these results?The exact measures (formative and summative) that will be used to document the success of the technology in driving student learning
The contingency plans that will be in place to redirect the project toward success if the situation goes awry Missing Assignment #3Missing Assignment #3: Choose the applications first, and the hardware and software afterwards.
This is a logical step that is best approached by "thinking backwards."
For example, if an entire campus will focus technology efforts upon improving student writing skills by daily computer access in every Language Arts class, a few other items are needed:Students need a central place to store their research and writing products on the campus or district's network
Students need individual computer accounts so that their work is protected
Students need access to the Internet
Students need a portfolio system where they can place completed work that will be graded and assessed by their teachers
Teachers need access to the portfolio system and an easy way to assess, evaluate and grade each students' workIn thinking this way, the project is seen as requiring…Enough computers for every student and teacher, and perhaps 10% more computers to be used as "hot-swappable" units in case one breaks
Service Level Agreements to ensure that every student has a functional computer in every class, every day
Network switching to accommodate this huge need for bandwidth
Network administration for all the student accounts, and the "moves, adds, changes" that accompany the arrival and departure of students
Network storage for "home directories" where students' work will be stores
Network storage for the Online portfolios that will deliver gradable work to teachers
Connectors to an Online grading system so that teachers can record grades, and so that students and parents can see progress in real time
Connectors to each student's previous high-stakes test scores so that formative assessment can be geared to each student's strengths and weaknesses
Student access to their "home directories" from outside the district (so that they can work on their assignments from home, or the public library)
Etc.If the focus is on science classes, gathering experimental data, connecting computer systems with probes and remote hardware…the requirements for implementing an integrated technology solution are even more complex, and expensive.Missing Assignment #4Missing Assignment #4: Building end-to-end projects instead of building piecemeal.
The reason that IT Departments did not build end-to-end projects was that funding was not available to do the job right.
Other reasons that IT Departments did not build end-to-end projects include:IT Administrators and Staff didn't have a clue about what teacher and students really need
IT Administrators and Staff didn't ask, observe and validate what teachers and students really need
IT Administrators and Staff assumed that the need for teachers was greater familiarity with softwareNote: The focus on software operation skills is irrelevant to the integration of technology since the use of the technology needs to be transparent to the user
In other words, teachers and students are distracted from the curriculum if they have to pay attention to the software Attention to the curriculum is the "mission critical" need of instruction
This means that the "back-end-programming" that would make the use of all network resources "one-click-easy" was never started.Summary of Missing AssignmentsWhat can you say that is positive when so many assignments are missing?
Maybe that IT Departments could have anticipated that they would end up in the position that the did, i.e., "reviled from the top" for spending way too much money without any educational outcomes to show for it, and "reviled from the bottom" by teachers and campus administrators for failing to listen, for failing to provide easy and workable benefits to

teachers and students, and for foisting "less than finished" solutions upon teachers with the message that learning to integrate this stuff was a "teacher problem."
School district IT Departments generally failed the old-time marketing maxim, "The customer is always right" by supplying a maxim of their own, i.e., "The customers don't know what they need, but we'll give them the right stuff, anyway." IT Report CardIT Departments earn an "Incomplete" on their report card.
Too many assignments were
The IT Staff meant well, and they worked hard. But, they neglected to complete the most important (mission critical) assignments, and instead busied themselves with hardware, software and network infrastructure issues, while leaving undone the more important direct support for teachers and students.
IT Departments also receive "low marks" for listening skills and communication. While they speak eloquently in "technical jargonese," they are found wanting in their ability to "read between the lines" and discover what technologies are truly important for instruction.
The area where IT Departments "completely bombed" is that of identifying an educational case for IT Projects, and of discovering the direct, measurable and reliable areas of instruction that benefit from the integration of technology. "Wishin' and Hopin'" that the purchase of equipment and infrastructure, without identifying exact, measurable, replicable instructional outcomes was the major failing of school district IT Departments.
This is homework that still needs to be completed.
Failure to complete this assignment (a prerequisite for all other learning) will keep school district IT Departments stagnant, reactive, and unappreciated.

Posted by Classroom Toolkit Newsletter in Open Source at 03:00

Saturday, March 31. 2007

Open Source for Education

Teachers to Open Source Advocates: "You have Homework!"
There are technology advocates that want to replace the software that is used in most schools with "no-cost" software. This kind of software is called "Open Source."The name, "Open Source" does not mean "free", but it means that the folks that create the software release the "Source Code" rather than keep that code as a business (i.e., trade) secret. What this means for teachers; i.e., how important this distinction is, is "not much." But, the Open Source argument distracts school district executives from more important questions.
What are more important questions than, "Can we save money on software?"The most important questions…Why should teachers care?
What benefits are there for teachers and students?
What about this software improves teaching and learning?
What about this software increases teachers' and students' productivity?
What about this software increases curricular goals, increases our job performance, increases the long-term value to employers of the students that we graduate, or increases scores on high-stakes tests?…Answers…
Why should teachers care?Because some of the rhetoric pushing this software scheme is yet another "outside group" (not teachers) that wants to dictate and control education
Because many of these folks (Open Source Advocates) "forget" to ask teachers what teachers and students need. Some of these advocates assume that they know what is best for teachers and students because they are "saving money" for school districts
Because these folks are chanting the "mantra of cost-savings" to high-level school district administrators, and because district administrators listen to this "No-Cost ($0.00) Spin"
Because high-level district administrators already think that too much money is being spent on technology without seeing a return on the investment (in terms of student learning and test score increases)
What benefits are there for teachers and students?Little or no benefits to teachers are delivered in this switch to Open Source software because …
High level district administrators are apt to grab the dollars saved on software and spend them on anything except the increased professional development and increased release time that would be needed for any new software deployment; i.e., teachers are expected to get up to speed on their own time, using their own resources
Sidebar(Note: teachers have already learned to use some software, often on their own)
Also, the cost of professional development and release time would be higher than the cost of the software that will be replaced, e.g., $100 for the software, $40 to $100 per day for substitutes, $18 to $25 per hour for extra duty payTeachers are often on their own in downloading and installing the software at home (where they do most of their planning and lesson development work)
Students are often on their own in downloading and installing this software on computers at home
The software that is targeted for this cost reduction is the Microsoft™ Office Productivity Suite, software that almost all teachers already own
Teachers and students need more than Office Productivity Software
Teachers and students need software that adheres to standards and offers interoperable (interchangeable) file formats and the ability for teachers to collaborate and share
It would be nice if the collaboration was automatic
Teaches need a complete set of tools that transfer components without rework, without saving, then importing into another program. Teachers need programs that work togetherSidebarFor example, when the teacher creates a Mind Map, the proper software will allow "one-click"…Creation of a Word Processing Document Outline
Creation of a Presentation Slide Show
Creation of a PDF file
Creation of a Web page
Creation of a Project Management Plan
The Sending a Copy by E-mailAnd it would be even better if a presentation slide show automatically turned into a Mind Map.One crucial option for recommending any software is ensuring that the software works with other educational software. This is know as the Schools Interoperability Framework (SIF) initiative. Compliance with the SIF initiative is generally missing in the proposal to save money on software. Possibly because making sure that software "plays nice" with other software also costs money (because this compatibility requires servers, infrastructure and technical staff).
SidebarNot all Open Source projects are useless for teachers.For example, the state of Indiana has an Open Source project that seems to be working well within its limited scope.(Note: The Indiana 1:1 Computing Project targets only high school language arts students, and the only focus is student research, report writing and presentation development.)

The Indiana Project focuses on learning and instruction. And learning and instruction are what motivate teachers to learn on their own, train one another, and share what works.
What makes the Indiana project a success is that state leaders had the wisdom to ask teachers what teachers and students needed.The Indiana Project Leaders also attribute project direction, creative project ideas, and suggestions for program improvement to teachers.It's clear that some educational leaders have the wisdom to focus on the needs and benefits to students, and not sell out to the "We don't have any money for education myth.""One Size Loosely Fits All"Replacing Microsoft™ software because Microsoft™ charges a licensing fee sidesteps several important questions…
SidebarMicrosoft™ already provides most of its software to school districts at about a 90% discount.
There is nothing to prevent school districts from purchasing licenses for teachers' home computers. In fact, some districts do this.
(Note: Teachers may want to exercise caution in accepting school district software because the school district may claim that the intellectual property that was created with that software belongs to the district, even if that intellectual property was created at home, after hours.)Is this "free" software as good, or better, than the Microsoft™ software?Answer: No. the commercial software is better (has more features, has organized technical support) than the Open Source software
Will this software be easier to use and require less effort to implement?Answer: Ease of use is about the same. Users just have to get used to a few minor differences.
New features: The nod goes to the commercial software. In fact, the newest version of Microsoft Office™ 2007 is "slick" (although most school district staff won't see this software until next school year.
Will school districts upgrade to Office™ 2007 any time soon? No.
Will teachers need to purchase anything out of their own pocket in order to use this software?Most teachers already have an academic copy of Microsoft Office™, and won't bother to upgrade until they purchase a new computer. Office™ 2007 is worth the upgrade if you are collaborating with others across a network or online, and your collaborators have the same software
Since teachers share very little, most teachers won't find the collaboration features essential
Training teachers to collaborate and making that collaboration easy is a huge missing ingredient in technology plans. (The reason: Doing this "right" would cost a school district a lot of money. It is easier to "spin" this responsibility as a teacher issue, and let teachers shoulder the implementation on their own)SidebarTeacher collaboration is the most effective time-saver that we can recommend. In fact, the Classroom Toolkit Open Source for Instructional Materials project is a collaborative effort.We are still looking for volunteers.Do you want to join us?Will teachers need to spend time learning how to use new software on their own time?Answer: Of course, compensation for professional development and release time, while the only choice if school districts offered true professional status for teachers, is "scarcer than a politician's kept promise"
Are the files that this software creates 100% compatible with what we have in our district and at home?Answer: This depends upon how well the planning, configuration and communication are within the school district. Planning also needs to consider communication and collaboration with colleagues in the greater world outside the school district
Is our district's IT Department equipped to manage this software? If the district's IT Department can barely keep up with repairs now, how will they be able to handle two kinds of software instead of one kind?Answer: The IT Department can't manage and must set standards based on instructional needs
The standards that the IT Department sets should be based upon educational goals, not just saving money with the lowest-cost option
The standards that the IT Department sets should be based upon solving the needs of teachers and students, based upon streamlining the learning process, and based upon making the use of the technology transparent. (This means that teachers and students can pay attention to the curriculum, and don't even notice what technology they are using)
Will the Open Source software work seamlessly in two important areas?…
Teacher and student collaborationStudents' electronic portfoliosAnswer: It depends on the standards that are setBeware of "Geeks" Bearing GiftsTeachers should be vigilant, worried, concerned, "maybe even hopping mad" when non-educators (techies, lawyers, politicians, court judges; even some school finance directors, and superintendents) make decisions and recommend solutions for education. Some of these folks barely know how to bungle along in their own space, but they have little face validity for making choices for educators.
Teachers should be alert and ready when "save a dime-- create a dollar's worth of hassles" proposals come to the table.SidebarActually, teachers should be grateful it they receive any advance notice for changes such as this. Often these "initiatives" just happen during the summer, and teachers are stuck with them for at least a year, when enough complaints cause the error to be fixed and the software returned the following summer.Other considerations are whether the Open Source software is "one version back" with the capacities and functionality that it offers.
The copies of the commercial products (the Open Source products) claim that they stimulate innovation, but they generally followers, not leaders, providing features and benefits that imitate the market leader. The reason for this is obvious, the market leader spends lots of research dollars to find out what the buying public wants. The Open Source developers do not have research dollars so they cannot perform the required research.Where Open Source ShinesSome Open Source advocates allow the disdain for how much money Microsoft™ makes, or their

displeasure that Microsoft™ refuses to hand over its "secret code" for them to play with to suggest ridding school districts of all Microsoft™ products. Open Source developers, on the other hand, are more pragmatic. Most Open Source developers create software that runs on the Microsoft™ Windows server and desktop platforms.
Using Open Source software that runs on the Windows™ platform is a valid strategy that provides lots of choices for additional software tools.
But, teachers will be hard pressed to find school district IT Departments that will allow them to use these "free" software tools.
The reason is that software in use in a school district is never "free."
School district IT Departments are notoriously under staffed and under paid.
And, the advocates of Open Source often cite the ability to run an IT Department on less technical staff when non-Microsoft™ hardware and software is used.
So, the IT Department that strips software use down to bare basics and shrinks IT Department staff to a skeleton crew is not going to provide the support required to provide all the Open Source software applications that teachers and students would like to use, even if that software runs on the Microsoft™ Windows platform.The Biggest Mistake of AllOpen Source advocates tout successes in saving money by creating high school computer labs using old computers and Open Source software.
These labs allow students to write reports and create basic presentations.
But, the biggest mistake of all is believing that elementary students can use these computers when they become too slow and useless for high school students.
What most these non-teachers fail to understand is that elementary school students require more computing power, more multimedia, more audio and video capacity than high school students who are writing reports. SidebarOf course the high school students require more computing power, too. But the "cost-saving, as cheap as we can get away with" mentality denies them access to it. The danger is that 1:1 Computing can become synonymous with "low-cost, refurbished, computing for every student, on the cheap" initiatives.Beware of any "techie guru" who spouts the words "low-cost, saving money, cheap." These folks are "non-educators or politicians," and their "near-sighted vision" (or tunnel vision) prevents them from understanding that the quality education that our students deserve is going to be expensive. Very expensive!And, elementary school teachers (along with every other teacher) require additional computing capacity beyond what students need.
In addition, high school students require specialized software, for example:Probeware
USB microscopes
Connections to graphing calculators
Instant messaging for communicating with mentors
Specialized software that is science and industry specific as they participate in real-world project learningAnd, does the Open Source platform support the auxiliary materials and instructional tools that comes with adopted textbooks?
If the text book add-ons run on Open Source platforms, do they also run on the Windows™ computer that the teacher has at home?How Classroom Toolkit's "Open Source for Instructional Materials" Movement is Different from other Open Source ProjectsClassroom Toolkit provides Open Source instructional materials for teachers that starts with what teachers need and what teachers can use.
Classroom Toolkit focuses on strategic processes, standards for streamlining teachers' work loads, tools that teachers can use immediately, and the lowest cost needed to "get the job done in an elegant fashion."
Classroom Toolkit's license requires that everything that is made (derived from) using our materials remain "free," while ordinary Open Source software and materials can be collected, revised, updated, altered and sold.Upcoming ArticlesThe integration of technology is a complex subject, and the April 2007 issue of Classroom Toolkit will continue this discussion of IT Department homework. The upcoming article will focus upon how technology integration advocates went astray by failing to provide measurable, student achievement outcomes as part of technology integration planning. Our May 2007 issue will complete this article series by describing the homework that technology integration advocates need to complete to provide the "back-end processing" that streamlines teachers' efforts and makes collaboration, coordination and communication "one-click" easy.

Posted by Classroom Toolkit Newsletter in Open Source at 03:00

Wednesday, February 28. 2007

Open Source for Education

Open Admin for Schools: Are Any US School Districts Using this Free Program?
Convincing school administrators to save money should be easy, right?
So, what about a school district and campus administration program that could save a school district multiple hundreds of thousands of dollars?
Why not replace expensive school administration programs with this free, Open Source alternative?What can this Free Software Do?Link to information about the Open Admin for Schools program…Here is a list of the components that are available in the secure, Web-based Open Admin for Schools product:Demographics - Stores student and family information that can be viewed and printed in a variety of ways. The student demographics are extensible; you can add your own additional data fields to store important information about students in your school(s)
Attendance - Attendance can be entered either by secretaries in the school office or by teachers in the classroom. The software has the ability to do different numbers of periods per day for elementary grades vs high school and middle years. Elementary classes can have two classes per day (AM/PM) with a homeroom teacher. Higher grades can have attendance done on a per subject period basis (and be subject-based). Attendance reports are integrated with report cards/progress reports. A variety of attendance reports are available
Discipline - A discipline module that tracks student discipline events and track outcomes is integrated in the Open Admin for Schools product. Administrators can categorize and post incident behaviors and print statistical reports
Report Card System - a flexible reporting system (with up to 20 subject objectives is integrated with attendance reporting. All report cards are printed as PDF reports and may include a school logo. All subjects may have unlimited length text comments, and can have any desired ordering. Attendance reporting will record number of school days, individual student's enrollment days, days absent, and the number of times that a student is tardy
Special Education Individual Education Plans (IEPs) -- The Open Admin for Schools program is integrated at the school district level so that special education teachers can tailor individual student programs with required modifications. These Individual Education Plans (IEPs) can be viewed by all authorized personnel. This function includes the ability to add student medical history, testing data, student team assignments and members' responsibilities. Objectives are chosen from lists of thousands, and these can be categorized in a variety of ways. Up to 32 objectives are allowed per subject and each 'subject' is specific to the needs of an individual studentThe Open Admin for Schools system can generate progress reports (for use with the report card system) as well as build a comprehensive IEP report containing the yearly plan for the child. This IEP can also viewed and monitored by authorized campus and district staff to ensure compliance with all Special Education requirements
Export/Import Modules - Allows students to transfer schools within a school district without having to re-enter demographic information. The program can also export data to other programs using an XML transfer system
Online Gradebook -- Allows teachers to enter grades and assessments online, from school or home. The program can group and weigh assessment items, and post directly into the report card system
Parent Viewing -- The Open Admin for Schools system allows parents to view attendance, gradebook data, and report cards. These features integrate into existing school Websites with little effort
Online Daybook -- Allows teachers to plan and and post their lesson plans
Upcoming -- Multi-language support, Family functions, Parent-Teacher Interview Scheduling, Wherever schools want to go...Wow! What doesn't the program do that needs to get done?
Answer: The lesson plan posting module is weak.
In addition, the program needs to become School interoperability Framework (SIF) Compliant so that data can be shuffled into and out of the program (be shared, prevent the need for entering duplicate data into several programs) with other programs.
But, Open Admin for Schools will remain on the world-wide adoption list, but find limited traction in the USA (except for parochial and reservation schools). Here's why…Saving Money this Way: A Hard Sell in the USAThe Open Admin for Schools program is free, but convince your school district administrators to ditch the high-priced administrative, finance, and management programs that they currently subscribe to in favor of a cheap alternative.
You won't find many (any) takers.
So, who is attracted to the Open Admin for Schools program?
Schools (world-wide) and people who manage these schools effectively are attracted to the simplicity, low processing requirements, and solid, basic functioning of the Open Admin for Schools program. The Open Admin for Schools program seems to be indigenous to Saskatchewan, Canada.Canadian Red TapeApparently Canadian schools have less red tape, fewer reporting requirements, smaller budgets, and maybe a manageable bureaucracy (oxymoron?).
So, in the United States, this product is not apt to catch on, despite the fact that a school district could save from $90,000 to multiple hundreds of thousands of dollars, the insane, obscene amount that is the going price of commercial

administrative software.
But, don't take our word for it. Check out these online demonstrations to see what this free product can do…Link to the Open Admin for Schools Administration Module demo…
Link to the Open Admin Teacher demo…
Link to the Open Admin Parent Module interface…
Link to the Open Admin Special Education Module…Free, but Priced out of the Market!What prices the Open Admin for Schools software out of US school district markets, except maybe for Parochial Schools, Charter Schools or Native American Reservation Schools?
Two answers:Reporting Requirements
Funding Source AccountabilityApparently Canadian schools don't have to report an array of data that would tax the logistical skills of Alexander the Great or Napoleon.
For example, do Canadian schools have to report to their executive and judicial branches of government?
Are there Canadian province database codes for identifying each discipline infraction that is referred to the campus office, codes for the ethnic background of each student, and reporting requirements (to the federal authorities) to discover (i.e., incriminate yourself or your staff, subject yourself to audit, lawsuit, and conviction in a trial by mass media) if minority students receive more severe punishments for similar behavioral infractions?
Does the Canadian Federal Government contribute nine percent of their school districts funding and demand 109% effort in data tracking and reporting in return?
If so, a product designed to track the basics of school management, such as Open Admin for Schools does quite well, "just won't cut it."
Does the Canadian government reimburse school districts for meals that are provided to children of lower-income families?
Do schools in Canada have to track each meal that they provide, and, if a child somehow needs to pay for a meal, but forgot their lunch money, do regulations require that the child must go hungry…then require that the food service workers throw the uneaten food out (because ineligible students cannot eat free food)?What Motivates US School Districts to Keep Subscribing to the High-Dollar Administration Products?Support for the Open Admin for Schools program costs only $63 USD per hour.
The cost of maintaining high-priced commercial school management products is from tens (to hundreds) of thousands of dollars a year.
But, school districts can't afford the Open Admin for Schools program while "not blinking, not flinching, not balking" when paying for the commercial products. Why?
School district administrators spend the extra money to "Armor Plate their Backsides."
"Bullet-proofing" the administrative "soft-side" is more important than saving the huge sums that the commercial products cost. In fact, no expense is spared if it shields an administrative "Gluteus from the Boot."
As far as US school district administrators are concerned, Open Admin for Schools, means "open season" on administrators if "spinable," self-preservation-related data is not as easy to access as student records.Audit ProtectionOne thing that politicians, bureaucrats and school district administrators know (despite the separation of church and state) is that "he who lives by spin, dies by spin." This "self-evident" truth means that any report, analysis or audit can be "spun" in creative ways if there is enough camouflaging data. The findings of the same audit can allow a politician, bureaucrat or district official either to "live or die," either to "be promoted or demoted," either to "gain commendation or censure," either to be "praised or pilloried." The spin that can be generated about the data is more important than the facts.
What the high-priced school district administration products offer is "Audit Protection," and folks of a bureaucratic ilk know that…They are vulnerable
Their only defense is "spin"
They are compelled to "take the fall" for "higher ups"
Any money, no matter how much, is well spent if it offers "positive spin capacity" and some "negative spin repellent ammunition."This is the reason that "budget-hoarding, bureaucratic tightwads" trip over themselves to morph into "luxury buying spendthrifts" when shopping for "Audit Protection."Open Admin for Schools: Offers what Administrators Need, not what they WantSo, no matter how good Open Admin for Schools becomes, no matter how much money a school district could "save" by adopting this product…Open Admin for Schools will fail to catch on until it offers school district administrators what they want instead of what they need.
What school district administrators need is an easy to use, low-cost, quality product that covers all the basics.
What school district administrators want is a product that can spew whatever numbers are required to "make themselves look good, and to make their decisions appear to be sound", no matter what evidence to the contrary.
So, Open Admin for Schools will continue to enjoy a world-wide following; except in the United States, where "spin management" trumps effective management, every time.

Posted by Classroom Toolkit Newsletter in Open Source at 03:00

Wednesday, January 31. 2007

Open Source for Education

Compile your Own eBooks: 100% Free for Classroom Use
Would you like to create your own eBooks for classroom use?Could eBooks be part of your training and professional development efforts?
If your eBook would be less than 25 Web page files, Activ eBook Compiler™ might be just your ticket.
One catch is that the compiled eBook is a Windows™ program. You have to use a Windows™ computer (or an operating system running Windows™) to create the eBooks with this program, and you have to use a Windows™ computer to read the compiled eBook.Not True Open Source: But Free ForeverThe 25 file input is the only restriction on this free version of the software.
Otherwise, the software is free to use forever at no cost.
The other restriction is that if you create eBooks and sell them, then you need to pay the $30 USD for the commercial license.
Link to the software:
Create your own E-Books with Activ eBook Compiler™What the Software Can Do…Here are some of the things that this free version of the software can do:Create an unlimited number of eBooks
Distribute the eBooks without paying a royaltyNote: Some other eBook compilers require a royalty fee to use their softwareDistribute the eBooks you create…By E-mail
On Disk or CD-ROM
Download
On USB or ZIP Disks
Etc.Protect your eBook Contents with Passwords (Entire book or selected pages)
Add Web links, Buttons, Menus
Create an automatic "searchable index"Why Compile an eBook when free "Export-to-PDF" is Available?Several Open Source alternatives allow saving your files as PDF documents. And, PDF solutions are great for many uses, including:Simple documents that were created with a word processor
Linear documents that don't require interaction, or multiple paths through the document
Documents that don't require password protection
Documents that don't require a lot of controlCompiled, Controlled, eBook DocumentsFeatures that make eBooks that are compiled with Activ eBook Compiler™ include…Compiling Websites and linked Web Pages, not just simple documentsCompiling Websites in this way keeps all files together in one package for E-mail and other distributionCompiled eBooks can include extra capabilities, for example, support for…HTML, DHTML
Image files and animations, such as GIF, JPG and PNG
Programming, such as JavaScript and VB Script
Most Plug-Ins that work with Microsoft's Internet Explorer™.Controlling what readers can do with the "Right Mouse Click"
Controlling printing
Setting an &Expiration Date", so that drafts are not opened or used after a certain time
Turn components (toolbars, status bars, colors, text labels or buttons) on or off
Add serial numbers, enabling the tracking of documents
Add an "Auto Install" option so that the eBook can be installed automaticallyIf you already have files formatted for the Web, then, rather than re-coding them to remove the HTML, then adding word processing formating back into the document, you can compile the document into an eBook in one step.Special Uses that Teachers Might Find for Compiled eBooks What kinds of uses would make the free Activ eBook Compiler a useful tool for teachers?
Here are a few ideas…Create "Take Home Tests" that expire so that students must complete them by a certain time
Create study guides that require a password to open the "Answers"Note: You can assign up to 1,000 passwords for the eBook, giving each student their own password. This means that students cannot share the passwordCreate test documents that expire so that students cannot pass them around to your students next year
Create an anthology of students' stories, use the Office Productivity software's capacity to "save as a Web page" compile the resulting "Website", compile this into an eBook and sell CDs with the stories as a class field trip fund raiser
Compile your classroom rules, procedures, goals; study resources, and other information of use to parents, and place this eBook online. This would save a lot of paper, and protect your photocopy monthly allotment so that you copy more important things than parent noticesThere are many uses for this free eBook compiling program. Let us know what other createive uses you find for the program as you use the trial version.

Posted by Classroom Toolkit Newsletter in Open Source at 03:00

Sunday, December 31. 2006

Open Source for Education

"Curriki:" A Goofy Name for a Valuable New Open Source Teaching Resource
The Open Source Movement has a new player with deep pockets (i.e., lots of money) and a wish to leave an legacy in the world of education. This desire to leave a legacy is similar to what Bill and Me linda Gates are doing with the Gates Foundation.
The money and vision sponsoring the Open Source Curriki™ Project is from Scott McNealy, CEO of Sun Microsystems™.
Microsoft™ and Sun Microsystems™ have been competitors for years, with consumers voting (with their cash) for the Microsoft™ solution.
It remains to be seen whether the Gates Foundation or the Curriki™ strategy will succeed (win) in impacting education in a positive way for future generations.Different Focus, Different StrategiesThe method that the Gates Foundation employs in improving education is to offer grants to local districts, states, and nations to bypass the bureaucracy that under performs, mismanages, or "misses the boat" in providing quality outcomes. This strategy succeeds to the extent that the inertia, stagnant thinking, chain of command lockstep, and other creativity and idea-sapping artifacts of school district bureaucracies are bypassed in favor of enlightened teaching.
The Gates Foundation strategy fails if school district administrators divert other funds that would have gone to the programs that the Gates grants now fund, if the school district administrators "fudge" the improvement numbers, or if school district administrators choose measurements of benefits that students receive that are so generic (and inane) that what the district has always done in a mediocre fashion looks (according to the data) to be progress achieved.
The Curriki™ strategy is to get teachers to donate materials to an Open Source database.
The Curriki™ project will succeed if someone with "educational intelligence " and a real-world knowledge of education can take charge and direct the project in a way that empowers teachers.SidebarNote: Classroom Toolkit labels this conceptual base as the Teaching and Learning Body of Knowledge (TnLBOK). Exploration of the TnLBOK requires a "Tell it like it is" attitude and the courage to publish "undecorated facts."
The creative and innovative ways that bureaucracies use to "decorate the facts of their collective performance" are lavish; an intricate, self-perpetuating, and a shabby substitute for success. Some folks would label this process as "Spin," but the fact-obscuring devices used by bureaucracies are much more ubiquitous, pervasive and intertwined into all aspects of a bureaucracy's "grasping-for-the-air-of-existence" to be encompassed with the simple label of "Spin."
The Curriki™ project succeeds if its mission of "Let's be the world-wide repository for all things educational," is supplanted with a sound rationale for the streamlined delivery of quality instructional materials packages.
Teacher empowerment is the key to success of the Curriki" project, and the Curriki™ project succeeds to the degree that the real-world needs of teachers can be met better with Curriki™ solutions than with other solutions.
The Curriki™ project succeeds if antidotes to the pain that teachers feel become freely and easily available. A good first step would be for the Curriki™ Project to use its publicity clout to hammer the greatest visible source of teacher pain, the No Child Left Behind Act (NCLB).
The Curriki™ project fails if the Curriki&#8482 project bureaucracy buys in to a bureaucratic solution for educational improvement.
Most of the project's sponsors seem to work for high-level bureaucracies, a source of work experience that is unlikely to produce the kind of thinking that can deliver enough of a radical departure from "bureaucratic business as usual" of our school districts to make a difference in the lives of teachers and students. The Classroom Toolkit ResponseClassroom Toolkit volunteered to be a Curriki™ project sponsor, and we will see if this relationship pans out.SidebarWe presented a similar presentation to representative of Sun™ Intel™, ISTE™ the Lucas Foundation™ Apple™ and several other organizations several years ago.
We don't believe that the Curriki™ Project is an offshoot of those discussions since the Curriki™ project would need to add several key features to match our proposal.Policy differences (between Curriki™ and Classroom Toolkit), that can be surmounted, include:Licensing Restrictions
Classroom Toolkit's license requires that any repackaging of our materials remain free to teachers. Companies cannot copy Classroom Toolkit materials and resell them to teachers or school districts
The Curriki™ license would allow others to package Curriki™ content and resell that content
Ownership of Materials
The Classroom Toolkit policy allows copyright ownership to remain with the original author
The Curriki™ Project would assume copyright ownership of contributed content
Placement of Tutorial Content
Classroom Toolkit's Tutorials (in development) are crafted so as not to create duplicate content. Search engines seem to penalize sites (with lowered page rankings) for posting duplicate content . Classroom Toolkit is protective of the high

page ranking of our articles and would not like to have these page rankings eroded. The Moodle! Open Source software that Classroom Toolkit uses allows original content to remain where it was first posted, thereby mainting the page rank of the original content.
The Curriki™ Project does not seem to mind that content is duplicated on its siteWhat Teachers can DoThe Curriki™ project is just getting off the ground, is getting a lot of media publicity, and holds some potential if enough teachers…Register
Post lesson plans
Offer "Real-World" suggestions for solving teachers' needs when the online forum startsUnfortunately, teachers who are employeed for school districts feel a reluctance (and a sense of self-preservation for their jobs), and are unlikely to provide the kind of information that the Curriki™ visionaries and sponsors need to understand teaching and learning as it really exists.
Since the project is new, we need to wait and see if the project becomes what its visionaries and backers intend it to be. And, spread the word about the Curriki™ site among your colleagues and friends.Background InformationLifelong Learning Forum 2005
Lifelong Learning Forum 2004
The Global Education & Learning Community (GELC)

Global Education and Learning Datasheet

Posted by Classroom Toolkit Newsletter in Open Source at 03:00

Thursday, November 30. 2006

Open Source for Education

Project Gutenberg and eReader™: Free Electronic Books
Project Gutenberg and eReader™ are not exactly Open Source, but both offer access to free eBooks.
"Content is King" on the Internet, but content for teachers is often expensive...oftern obscenely so.Not only that, but content takes time to create…time that teachers don't savor in abundance.
But while Project Gutenberg and eReader™ offer a source of free content, other strategies are needed to make use of these resources.
See Classroom Toolkit's Instructional Management recommendations for a modular strategy using reusable teaching materials. See this newsletter concerning the download of our ISO disks.
Of course, there are other "catches"…Sending students to read raw text files (such as Project Gutenberg) can create frustration
Copying and converting raw text files requires edit and format time
One student could tie up the only classroom computer for a long time reading long text passages
Students don't have the attention span (or frustration tolerance) to listen to long passages of computer-generated voices that read the content (Hint: Probably you can't stand this kind of information input, either.)
Reading-straight-text assignments product less than stellar results, except for the most motivated and over-achieving studentsWhat to Do?
One solution is to convert straight text to an eBook-readable format.
There are several ways to perform this magic...Load the text file into a word processing program, then save as a Web page

Drawback: The created Web pages are filled with junk code
Drawback: Formating is necessary (and time consuming)
Convert the file to PDF format
Drawback: Line breaks and other formating errors can creep in to the saved PDF file
Benefit: Anyone can read the PDF file with any Web browser
Convert the file to the eReader™ format
Drawback: Formating is necessary
Benefit: The file can be read on lots of portable devices..
Note: Perhaps instead of banning cell phones, schools could require that the cell phone be able to read eBooks.
Have your district purchase a site license for a 250 or 500-title collection of preformatted eBooks.
Drawback: The cost is either $1,000 or $1,500 USD.
Benefit: The text is formated and readable on all kinds of devices
Benefit: For $3.00 or $4.00 USD each title, every student, parent and teacher in the district can have access to 250 to 500 eBooks.
Benefit: The software for reading these eBooks is free (at least the "free version" is free)eReader™ SoftwareThe eReader™ software comes in a "Free" and a "Pro" version. The "Pro" version of the software costs $10 USD. The "Free" version functions as the "Pro" version for ten days, then some features of the "Pro" version become inactive. That is, after ten days, the "Pro" version degrades to the "Free" version.
Another catch, if you want to format eBooks yourself, the software that creates these eBooks costs $30 USD. The biggest catch: formating takes valuable time.
There is also a demo version of the eReader™ eBook creating software, but, unfortunately, you cannot just create lots of documents during the trial period. Well, you can create as many documents as you wish, but you will wish that you hadn't because each page will have a "Made with Demo Version" in huge letters.
So, why bother with this software?Available PlatformsThe eReader™ software is available (for free) for the...Palm OS
Pocket PC
Windows Mobile Smartphone
Sembian
Windows Desktop
Macintosh Desktop
The idea is for this software is to make text (such as entire books) available for mobile devices.
For example, I read the free book, Tarzan of the Apes by Edgar Rice Burroughs on my Palm Pilot™ T3. Now I am testing The Swiss Family Robinson...also free.eReader™ eBooks for SaleThe collection of eBooks for sale ranges from free to the full price if you were to purchase the physical book in a bookstore. But, if you own a potable device that

can run the eReader™ software, you could "learn on the go."
For school districts with a strategy of providing students with a Portable Digital Assistant (PDA), eReader&$8482l sells the collections of 250 eBooks for $995 USD or 50 eBooks for $1,495. These titles are loaded on the district's server, and downloaded to the PDA device for reading and study.
Of course, the logistics of, say 1,000 students in a high school, each downloading daily assignments would need to be streamlined. (And some high schools have three or four times as many students.)
From the eReader™ Website...&The Education Classics Collection, a comprehensive collection of 500 titles that includes "The Red Badge of Courage," by Stephen Crane, "Little Women," by Louisa May Alcott, "Night and Day," by Virginia Woolf, the works of William Shakespeare, and other books commonly found on middle and high school reading lists.
This collection provides schools with a cost-effective way to easily distribute eBooks to students. The eBooks cannot be lost, stolen, or damaged, and the license entitles the school to internally distribute as many copies of the eBooks as it wants, as many times as it wants."Project GutenbergMany titles that are in the public domain are available from Project Guterberg. In fact, Project Gutenberg now has over 17,000 electronic books in its library.Timesavers, Or Not?There are some ways to format plain text documents that don't devour a teacher's every waking minute...Arrange for students to format text during learning center and writing conference activities
Use global formatting for the entire text, then apply styles to titles, subheadings and bullets
Project sections of the text using an LDC projector, and apply formating in real time during a whole class (or small group) discussion about the meaning of the text and how formating can communicate that meaning
Find parent volunteers or retired teachers who will do the formating for you
Work out a set of "macro" commands that will automate the
Test one of the many text conversion utility programs (free or Shareware). Note: Search many sites for these. Link to one valuable resource for finding these conversion utilities...
With imagination, help or automation, providing learning experiences using free, public domain text provides benefits for teachers and payoffs for students.
And, if you format one of the Project Gutenberg or other text using the eReader™ format, please post the text on the Internet so that other teachers can use it.
We will be glad to post these files if you cannot find another sponsor.
Send a description of what you would like to share to…joseph@classroomtoolkit.net

Posted by Classroom Toolkit Newsletter in Open Source at 03:00

Tuesday, October 31. 2006

Open Source for Education

Donation Coder: Not Exactly Open Source...But a Great Deal for Teachers
Teachers like "Free". In fact, no cost is the only reasonable strategy that teachers have before dipping into their own pockets for necessities for their classrooms.And, you don't have to spend your own money at DonationCoder.Com. Every program available there is "Freeware." This means that you receive the full program, no time limits, no crippling restrictions.
What the folks at DonationCoder.Com do is ask that you register for the program that you download so that they can ask you for a donation.
You don't have to donate. But, if you pick up a program that saves you a lot of time, or provides other benefits, why not show a little (monetary) appreciation.Link to the Donation Coder SiteUnusual ProceduresIn order to encourage people to really "consider" (think about more than half a second) donating, Donation Coder uses an unusual device. For people who don't donate:
The freeware license key will remove the "nag" from the program for six months.
After six months the "nag" reminder will come back and you have to return to the DonationCoder site page to create a new license key. The second key will last for another 6 months.
After one year (from your initial installation of the program) you can obtain a permanent "non-expiring" license key.
Of course, if you choose to ignore the "nag" message, the software works perfectly from the time you download it to forever.
Seems more than fair.What Programs can you Get from DonationCoder.Com?There are hundreds of free programs, many that are geared for programmers. But, many can be adapted for classroom use.
For example...
Screen Shot Captor
Clipboard Help and Spell
Mobysaurus Thesaurus
Flipbook Printer
Google™ Translation Boomerang
Many more...see for yourselfOther BenefitsIf you donate, you become eligible for the Donation Coder Specials and Discounts. You also become eligible for monthly software prizes.
Donation Coder.Com negotiates substantial discounts with software developers each month, and the selections and discounts are different each month.
But, donating $2 and saving $20 to $40 for software is a pretty good trade.
Check out the DonationCoder.Com site, and see what incredible bargains you can find that will benefit your students.

Posted by Classroom Toolkit Newsletter in Open Source at 03:00

Saturday, September 30. 2006

Open Source for Education

Visual Thought™ - A Free Mapping and Diagramming ToolVisual Thought™ is actually "Freeware" rather than an Open Source program. (The difference is in the wording of the license).Classroom Toolkit is reviewing this program to coincide with our book review of Mapping Inner Space in this issue.
The practical difference between an Open Source program and this freeware program is that you can download and use the Visual Thought™ program without cost for only the next 13 years. After 13 years, the license will run out and you will have to uninstall it...but in the meantime, you can use a mapping, diagramming and flow-chart making program for free.
Look at what this program can do...

Even more amazing, the objects that you create with the program can be connected with "Smart Connectors." Smart connectors are lines that stay connected, even when you move the object around on the screen.
How to Get this ProgramLink to download the Visual Thought™ program.
Link to download the Visual Thought™ documentation.What Else Do you Need to KnowBecause the Visual Thought™ program requires a license key, you have to enter one after you install the program.
But, installing the license key is done with a separate program, not through the Help Menu.
When you start the Visual Thought™ program through the Program Files menu, start the Admin applet, instead.

Then, enter the following key in the rectangular block...

License Key to enter: 0356 9674 3262 8895 9914 96
That's it.
Now you and your students can use the Visual Thought™ program to diagram all sorts of documents, presentation, Web pages, notes and drawings.
You will find multiple uses for this program, particularly when you capture portions of the drawing on screen with a screen capture utility program. The power of the Visual Thought™ program is in its rapid drawing and editing capacity.
For a listing of free screen snapshot programs, visit, Ask.Com's free Screen Capture directory.
Happy Snapping!

Posted by Classroom Toolkit Newsletter in Open Source at 03:00

Thursday, August 31. 2006

Open Source for Education

dl dt {font-weight: bold;}
Learning Management Systems: Course Development Software for Free!
Some school districts pay a lot of money for commercial Learning Management Systems (LMSs), although most school districts don't use them. However, some Open Source advocates suggest that school districts turn to free LMS alternatives and offer online courses for their students. Here is Classroom Toolkit's stance on this topic.Note: We have not implemented or tested all of these different software products (we don't have that kind of time, or in the case of the commercial products, that kind of money); but we are developing tutorials that use the Moodle™ program.
We'll explain the reason for our choosing the Moodle™ LMS later in this article.
What are these Learning Management System programs, and what do these programs do?
Open Source LMS Programs
Some of the Open Source programs classified as Learning Management Systems (LMSs) include:ATutor™
Link to ATutor™ siteBenefits:Installs in minutesIs W3C Accessibility Compliant (i.e., works with adaptive devices for the handicapped)Complies with the SCORM protocol
Interact™Link to the Interact™ siteBenefits:Easy to use and FlexibleCost effective and without hidden costsCapable of building online learning communitiesCan be used as a Intranet portalOpen Course™Link to the Open Course™ siteBenefits:Makes collaboration easyContains lots of Open Source presentationsSmall project, so your contributions will be noticedMoodle™
Link to the Moodle™ siteBenefits: Built in tools include the ability to use Articles, Assignments, Chats, Forums, Grading, Glossaries, Links, and WikisLots of activity and the product is constantly being updatedLoads of expansion modules and tools. Can be customized with themes to change the product's "look and feel"Scripts available for many Web hosting companies to automatically install the Moodle™ productMyClassroom™Link to the MyClassroom&#8482 siteBenefits:Many content area courses and lessons onlineMembership allows customization for your classes System includes Syllabus, Quizzes, Course Information and Student Information. This project's interface is built on a semester metaphor.These are not the only Open Source LMSs available, but these present a snapshot of the programs that are available.
Some of the LMS programs are small and based upon the work at a specific college. Others are large-scale projects with a world-wide development community. Moodle™ is one of the biggest LMC development efforts.
By just looking at the list of benefits, you can probably guess the reason that we are building our tutorials with Moodle™.
Another reason that many people choose Moodle™ is that major online hosting companies have automated installation processes that will set up Moodle™ on your Website without additional cost (in only a few minutes).
Commercial LMS Systems
Some of the competing commercial software programs in this category include:
Breeze™Link to the Adobe Breeze™ siteBenefits:Product uses Flash™, so most computers have the plug in already installedMonthly and Pay per use PlansProfessional Development and Teleconference ModesState of the Art technologyBlackboard™Link to the Blackboard™ Academic Suite siteBenefits:Large installed base, particularly Universities and Large School DistrictsContent delivery, professional development, communications and assessment Supports standards such as SIF, IMS, and SCORM, and connects with data warehouses and student information systemsWebCT™Link to the WebCT™ siteBenefits:Acquired by Blackboard™, so WebCT won't be suedIncludes pre-packaged content and pre-built quiz banksProvides hosting, technical support and trainingThe commercial LMS products are very expensive. The Open Source programs are inexpensive. How can Open Source software that costs $60 a year, or less to host, compete with software that costs $9,000 per year, or much, much (tens of thousands) more?
Answer: Quite effectively.
If these Programs are Free, Why do School District Pay for Expensive Ones?
Districts use the expensive programs because they have the funds to spend. "Funds to spend" are only partially related to costs.
Costs include start-up costs, ongoing costs and technical support costs. For a small school district with only Microsoft™ certified personnel, if they hire certified personnel at all, ongoing and technical support costs may be too high if district staff do not have employees that are qualified to work on the Open Source software.
In the case of Learning Management Systems, there will always be additional costs. Some of these are:

The cost of training staff to use the Open Source application
The cost of paying staff to develop the lessons that will be placed on the Open Source application

The cost of paying for the rights to use lessons that someone else creates

There are also hidden cost savings that are often overlooked. For example, when school districts take advantage of some grants (and especially the eRate program), the money can be used for outside vendors, but cannot be used to pay district personnel. So, it is possible to acquire expensive products with someone else's money that do not have to be funded with local funds. To school district administrators, projects funded with someone else's money look more desirable than better projects that are more cost-effective and more effective. Better educational outcomes seem less desirable if they have to be paid for using local money. (Note: School district administrators seem shy about paying for anything through the use of local money. This results in the "low-bid syndrome" and the "What is the minimum cost/ just make it look like we are addressing the issue" strategy.)
So, you see that "free" has many costs associated with it.
There may be other potential hidden costs associated with a Open Source LMS choice. For example, a commercial company, BlackBoard™ filed a patent that many experts believe was granted in error. Then, Blackboard™ bought up competitors (for example WebCT™ under the threat of a lawsuit for using their patent. Blackboard filed suite against one such competitor that wouldn't sell. (See ATutor™ Forum Article. The districts that can afford LMSs may want to avoid any patent infringement lawsuit issues, and so they stick with the high-priced products.
There is also the difficulty of migrating courses built by any proprietary system to another system. So, once a district has a substantial investment in courses that were built for one system, they are basically locked in to that system. this is a benefit derived from using the Moodle™ system since Moodle™ courses can be transferred easily from one online host to another.
And, as you will see, as expensive as these LMSs are, the cost of course content is incredibly more expensive. School districts could not afford to create content for one LMS platform, and then not be able to use the courses that they paid to create.
Of course, Classroom Toolkit (Link to Classroom Toolkit site) advocates free access to a Learning Management System. Openness (transparency) and sharing are ideals that build quality learning experiences for our students. Access to online courses is important for our students, and it is deplorable that our school districts cannot figure out how to offer this instructional benefit to all our students.
Having a commercial company destroy competition and innovation with legal ploys instead of providing innovative learning products at affordable prices and competing in the marketplace by building a "best-of-breed" product is an even greater disgrace.
Note: Lots of Open Source advocates are angry at Microsoft™ for destroying competitors, even though Microsoft™ sells its products to school districts at about one tenth the list price of its products.) If school districts were actually offering online courses like they should be doing, there would be a real outcry. But, since most districts are not offering this service, the lack of online course goes largely unnoticed.
If these Programs are Free, Why don't more School Districts Use Learning Management Systems?
Most school districts don't use LMSs, period.
This is a deplorable situation, but a situation that is easy to explain. (No, we are not going to rant about inept bureaucracy or politicians, again.)
The reasons that school districts don't provide this obvious learning resource to their students are:

Creating content, especially online content, takes time...a lot of time
Writing content takes skill
School districts can't afford to pay for the release time that teachers would need to build these courses
If teachers build these courses on their own time, then, teachers expect ownership or compensation for allowing the district to use the course
School district leaders believe that teacher time is free, and they believe that they have unlimited use of that teacher time; therefore, they do not want to pay teachers for building courses
Teachers who build courses using school district computers, even on their own time, probably relinquish copyright ownership to their employer, even if it were not commissioned by their employer to produce the course
Once school districts build courses, they are stingy about sharing these courses with other districts

Of course, teachers in some school districts could build online courses on their own. In other school districts, teachers may have to obtain permission to place anything online, even a course that benefits their students. In some cases, school districts claim all the work that their employees create, whether that work was created on district time or not.
Why did Classroom Toolkit choose Moodle™?
Classroom Toolkit provides access to world-class materials for teachers without charge. This means that we do not have a way to pass costs on to the teachers that we are helping.
This also means that all costs must be kept low.
The costs for running and maintaining a LMS include either a server and connection to the Internet, or, Website hosting. Classroom Toolkit uses two hosts: Our original host, from SiteSell™ and an additional site from Go-Daddy.com, since the SiteSell™ hosting company does not offer a method for hosting interactive tutorials or project-based

interactive courses.
The Classroom Toolkit tutorials are in development. For a preview of what will eventually be online, follow this link. Preview of the Classroom Toolkit Tutorials.
Moodle™ allows capturing and migrating courses from on server (or hosting site) to another. Therefore, any Moodle™ courses can be saved, moved to new locations, swapped, even bartered.
An example of this ability is the Strategic Open Source Special Interest Group (SIS-SIG) of the Texas Computer Education Association (TCEA). The SOS-SIG established a Moodle™ Exchange to allow the transfer and sharing of Moodle™ courses for its members. Link to the SOS-SIG Moodle™ Exchange
Special Offer: Perhaps Someone will Volunteer in your Area
Here is an idea for your area. It is modeled after an Open Source volunteer effort in Texas where a retired Open Source volunteer (advocate) installs Open Source servers and software for school districts. The Open Source software is placed on older computers, and the district's IT staff are trained at the same time (if they want to be trained).
The cost to the school district, only one day's travel expenses of the volunteer. The volunteer even pays for his own meals.
Here is what the special offer looks like.
Link to volunteer offer to install Open Source Server and LMS software.
This model is one that Open Source organizations and educational organizations should consider adopting for their region.
We also need to extend this effort with a training component so that teachers can learn how to build Moodle™ and other Open Source courses.
Fortunately, the basic skills for building a Moodle™ course are about the same skills as are required for general office productivity software, i.e., word processing, spreadsheet, presentation, and graphics skills.
Teachers Going it Alone
Here are suggestions for teachers who want to use Open Source courses on their own.
You may want to do this to protect and retain ownership of your work!
But beware, some school districts claim ownership of all the writings of its employees; whether the employee develops the materials with the district's equipment or not, whether the employee develops the materials on the district's time, or not.
There are a number of Web hosts that you can use. You can search on the term "moodle hosts" at any of the search engines.
For less than $5 US, you can host your own site. Link to the Site Ground hosting site. The Site Ground plan comes with a free domain name, and .
Classroom Toolkit has also designed a hosting plan that includes a Moodle™ setup for only $3.65 per month. The catch is that you have to sign up for an entire year, and the domain name costs $5.00. Link to the customized LMS hosting plan.
If you would like to design a Moodle™-enabled hosting plan of your own, you can create an account with Reseller Panel™. Reseller Panel™ offers a reseller plan that you can customize to your own specifications. The difference with the Reseller Panel™ plan is that you don't have to purchase (or pay) anything until you sell a plan. The catch is the yearly contract requirement. Reseller Panel Do-it-Yourself (DIY) Hosting Program
If four or five teachers joined together, and shared on Moodle™ site, they could use either plan for $1.25 (or less) apiece per month.
Summary
Real, on-the-ground, actual implementation of Open Source Learning Management System courses is more complicated, complex and time consuming than just using some free software products.
But, if teachers work together, in the Open Source spirit of sharing, online courses can be created with minimal cost. And, Moodle™ makes it possible to share these courses with teachers around the world.

Posted by Classroom Toolkit Newsletter in Open Source at 03:00

Monday, July 31. 2006

Open Source for Education

Open Source Projects in our Schools: Let's Dialogue about Real World Issues
I believe that real-world issues need to be opened for discussion, and that an open dialogue needs to begin.Open Source Advocates need to open a communications channel to bring teachers into this dialogue, and they must pay attention to the needs of teachers. If Open Source Advocates fail to complete this single step, they become no better than the clueless administrators that drive unworkable, useless and detrimental curriculum initiatives.
Most of the time, Open Source Advocates put technology first, and teachers are not considered as a primary part of an Open Source implementation plan.
I suggest that Open Source proponents open a dialogue with teachers, discover curriculum needs, and assess the "what is" condition of education before presenting solutions. Any sign off on Open Source solutions needs to come from teachers, as well as other stakeholders.
Teachers prescribing technology and Open Source Advocates prescribing "solutions to educational intelligence issues" are both dead ends.
The teachers job is to set requirements, functional targets, and student outcomes. None of these should be (or can be) set by Open Source Advocates, district administrators, or school district technology departments.
Once teachers set requirements, it is up to technology staff and other support staff to identify a package of equipment, software, and support services that can deliver on these requirements. (This package is the project or initiative.) The technology department should develop a service plan, called a Service Level Agreement (SLA). The SLA spells out uptime, response time, and other service factors that will be guaranteed. Technology staff also should also attach a price tag to this entire package...a realistic price tag with enough funding for contingencies.
The teachers job is not to prescribe technology or set budgets. Delivering instruction is what teachers are experts at. Teachers do not know the ramifications of the purchase of any technology system, computer purchase and long-term maintenance requirements, of network feasibility.
Once teachers set requirements, and after technology develops a solution package and budget; it is up to district administrators to put together a funding strategy. District administrators have a limited knowledge of instruction, and a less than competent knowledge of technology; so their focus must be restricted to identifying priorities and putting together a funding package.
A funding package consists of all elements that are required to ensure that the project will be successful.

Teachers will identify every (and all) instructional cost associated with the project proposal, including:

Training and professional development...

Costs for Release Time
Costs for After School Stipends
Costs for Trainers
Costs for Training Materials
Costs for Training Equipment
Costs for Consultants

Technology then calculates the total cost to provide a solution for each requirement.

All hardware, software, network and support costs will be evaluated
All training costs will be calculated

Administrators will identify all direct and indirect management costs associated with this project

Cost Areas
The biggest factor responsible for whether a school district obtaining its money's worth [Return on Investment ROI)]in any Open Source project implementation is the professional development and the backend systems programming that need to be put in place. Almost every district fails on this crucial measure.
The reason for this waste and inadequate planning is the making decisions and project choices without finding out what teachers and students need. This mistake is made both by district administrators and by district technologists.
The second factor contributing to project waste is the under funding of almost all educational programs.

The areas most likely to be shortchanged, under funded, "skimped on" are the items that teachers need most:

Release time
Paid training, if after the training is held after hours
In class modeling (of technology integration methods) by experts who have actually done this integration successfully
Personal self-improvement plans that targeted a three-year period for gaining competence
Access to reliable technical support instead of a 150 to 1 (or more) computers per technicians staffing levels

If school district administrators do not want to pay for the introduction of technology in a professional way, they should say so.
Valuing Teachers
Teacher time is under valued, disrespected, and considered "free."and teacher status is less than professional.
It is ironic that because teachers are considered "professional" that they are considered "exempt" from overtime (and fair treatment). This means that time that custodians, cafeteria workers and bus drivers is respected more (and paid attention to more) than teachers’ time.
The True Meaning of "Exempt"
What "Exempt" means in actual practice is...

Hundreds of extra work that teachers do will be uncompensated
Teachers will be forced to work on "extra" projects to make up for administrator mismanagement and budget shortfalls
Experimental, superfluous, political and questionable initiatives will be forced on teachers
To compensate for budget planning shortfalls, teachers will be forced to do more; i.e., teachers are an almost unlimited source of free labor

Because these forced and unreasonable projects are not funded (they operate "below the radar screen". Unless the project accidentally pans out, no one will ever check to discover just how much teacher time and teacher energy were wasted on the go-nowhere, achieve-nothing, "push stress to the max" initiative

The uncompensated time that teachers are forced to "contribute" will not be appreciated
Teachers will be blamed for the less than satisfactory results of the "initiative"

Adopting an Open Source Strategy
An Open Source strategy has a chance for adoption in our schools when Open Source advocates start talking to teachers and describing benefits for adoption to teachers using educational and student outcome terms.
Talking to teachers about how Open Source software is free, or how Open Source software is is "better" than Microsoft™ software is useless.
Microsoft™ software is good enough for what most teachers want to do, teachers buy Microsoft&38482; office software for about 1/3 that retail price, and the Microsoft&8482; operating system software comes pre-installed on their home computer.
Teachers don't know (and probably don't care) that Microsoft&8482; sells office productivity software to school districts at almost 1/10 of the retail price...almost giving the software away.
And, teachers don't care if money is saved on software because there is always plenty of money to fund useless projects that some administrator pushes without asking teachers if the project is of any value. (When royalty feasts, it is difficult to convince the peasants that there is a famine.)
Dialogue Across the Board
I am not advocating that we focus a dialogue on a single group (teachers), to the exclusion of other stakeholders.
What I am proposing is that we pay attention to teachers instead of ignoring them, instead of treating them as though they were an unlimited source of free work and instead of treating them as though they were of marginal importance in the planning, delivery and management of instruction to our students.
The success of the Open Source Movement needs to be measured by learning outcomes for our students, rather than how much of what kind of computers and operating systems are installed; or by how much money was not spent. This success must be systemic and systematic if it is to be considered accomplished.
Systemic and systematic means that the levels of teacher performance and the level of improvement of instructional delivery and instructional management skills are measured.
Success of the Open Source project depends upon the benefits that the technology delivers to students and teacher, benefits that cannot be delivered better in any other way.
If any other conditions are set as outcome targets, we will continue to see what we have now, an oasis of technology application here or there, scattered in the desert of computers with no real curricular use.
It is unrealistic to think that any one group can assume sole leadership of the Open Source movement, but, the Open Source movement needs a strategic focus. Because teachers are the key to education, I believe that teachers should be the Open Source movement's strategic focus.

Instead of thinking, "Teachers have not been doing their part to integrate technology, let's put more pressure on them," a better and more accurate assumption is needed. That assumption is that "Technology will be integrated when it is easy enough, and reliable enough, and when it solves enough instructional needs." Until technology benefits become invisible; and instructional needs be come obvious, apparent and visible through the use of technology...benefits for which technology delivers the easiest, fastest and most desirable results...the Open Source advocates will be talking another language other than "teacher language."
Real-World Questions
Here are some questions for the real world that Open Source advocates need to ask:

What will it take to ensure that every student is helped along in the curriculum through the use of technology tools?
What support do we need to provide teachers for integrating this technology?
How long will it take teachers to develop new skills, how long to implement new ways of teaching, how long to change?
How do we restructure school governance and operation to ensure that these changes are made, system-wide?
How much money will this take?
When do we commit whatever it takes to make this happen?
What other "priorities" will we have to defer to make this happen?
What backend programming do we have to complete before our solutions are easy enough for teachers to adopt?

Marketing Educational Benefits
It is benefits that build adoption, not technical superiority.
Open Source solutions needs to be marketed, and that marketing needs to focus on benefits to students and teachers, rather than a focus upon the technology.

"Ease of use" was not enough to keep school districts loyal to Apple(TM), and "Free" is not enough to bring school districts into the fold as serious adopters of Open Source technology.
What Open Source developers need to be working on are "Killer Applications"...applications that will make teachers' work easier and more effective?
I always point to the copy machine as the competition that Open Source, computers and software must beat in the classroom.
Open Source software and materials solutions must become...

"Push button" easy
Indispensable

The test is whether Open Source software and materials save teachers time, reduce teachers' work load, and perform job-related tasks better than any other application.
When Open Source solutions can answer, "Yes, we deliver time-savings, workload reducing, better than anything else" solutions, the Open Source movement will be over.
Open Source will then be "Mainstream."
Real-World Action Plans
Programs, initiatives, projects and prescriptions cannot be copied from one site to another, or even from one classroom to another.
Real-world action plans have to be unique and tailor-made for each location, no exceptions.
The same "prescription" will not work for every campus in a district, or, for any two districts, and maybe not for any two campuses within the same district.
This is one of the mistakes that politicians and administrators make when they want education to conform to Industrial Age, factory output methods. The outcomes from this approach will always tend toward the mean, i.e., move closer and closer toward mediocrity.
What this means is that Open Source solutions must be easy to customize.
Open Source solutions must be dynamic, not static. Applications must be easy to be made to do what teachers want.
The applications should not make teachers do what the application wants.
Take Standards with a "Grain of Salt"
A district must strike a balance between standards and individual creativity and dynamic, self-directed improvement.
Too many, tight, rigid standards; and creativity and spontaneity are sapped, and educational outcomes are diminished.
There is lots of stress in the classroom that coalesces around conformity.
Too few standards, and curriculum maps become puzzles, educational outcomes diminish and stress abounds.
Standards without funding sends educational outcomes into a downward spiral.
Standards without professional development and sufficient "time to learn and practice" sends stress (for both teachers and students) "through the roof."
And, that professional development must be done right.
Instead of learning word processing, spreadsheet use, and the other flavor-of-the-day application initiative; the training

needed to focus upon what teachers do in their classrooms, minute-by-minute to engage, motivate, empower and energize students.
The educational outcomes (results) that most schools and classrooms have achieved from the introduction of computers has been dismal.
I think that we would have seen the same appalling results if Open Source systems had been placed in schools, if Open Source operating systems had been placed in schools in the same way that the Microsoft™ and Apple&8482; systems were.
Learning from our Mistakes
This Opinion-Editorial suggests the changes that Open Source advocates and school districts need to make to bring the promise of Open Source solutions to fruition.
Do you think that Open Source advocates, school administrators, politicians and school district technologists have learned from past mistakes and are charging a corrected course toward well-managed improvements.
What is the chance of success for the Open Source movement?
Answer: There is a high chance of success if teachers are involved in the planning, funding and implementation dialogue.
The chances of mediocre results or downright failure, similar to our track record, remain high if teachers remain shut out of the planning, funding and implementation dialogue.
The Key to Open Source Success
Teachers are the key, but someone has to show politicians, school administrators, school technologists and politicians that there is a door and a lock.
Teachers are the key, but someone has to convince politicians, school administrators and school technologists to stop turning locks and doors into walls and barricades to learning.
Our prescription for Open Source success: Start talking to teachers, start listening, start fulfilling teachers' needs.
In the immortal words of teachers everywhere, "OK Class, please pay attention."

Posted by Classroom Toolkit Newsletter in Open Source at 03:00

Friday, June 30. 2006

Open Source for Education

Open Source in Education: Open Source Teacher Materials
Classroom Toolkit is in the vanguard of Open Source Materials for teachers.
Other sites offer free materials, but few, if any offer world-class, new, creative materials for teachers.
Many sites want to charge for the individual materials, or charge a subscription fee to access the materials collection.
Some free sites are the posting of class projects: either public school, undergraduate, or graduate class projects. These sites offer great materials, but usually the offerings are discrete lessons or units.
The Classroom Toolkit Goal
Classroom Toolkit is different.We provide...

A how-to for a unified, connected, total classroom planning and classroom management system.
A focus upon teacher and student empowerment in a "Let's increase accountability as we take away resources and funding" world
World-class, original materials that model efficient and effective instructional strategies
A Newsletter and Blog that "Tell it like it is" about the challenges that teachers face
News and commentary that reveal the truths and insights that teachers would speak for themselves if they weren't in danger of loosing their jobs if they did speak out

Creative Partners Needed
Classroom Toolkit is looking for teachers who want to share the materials that they create.
Please volunteer if you want to develop Open Source content for other teachers.

What is Open Source Content
Classroom Toolkit originated the Reciprocal Public Materials License concept.
Classroom Toolkit Reciprocal Public Materials License
This license is similar to how Open Source Software is licensed.
The rules for this license are quite simple:

Anyone may use the materials with out charge, as long as they do not charge their students for the materials
Anyone may add to and revise the materials
Any additions, changes, revisions of the materials may be distributed with the original materials, but both components must be distributed without cost
The copyright remains with the original author
Anyone that creates additions, changes or revisions only holds the copyright for the portion that they create

How does this Benefit You?
Teachers everywhere get to use quality Classroom Toolkit materials without cost
Teachers save time in several ways:Classroom Toolkit materials are...

...modular and reusable
...adaptable to many kinds of lessons
...built on learner-centered, empowering principles
...built with a knowledge of how multisensory processing and a stress-free learning environment increases thinking, problem-solving, decision-making and learner self-concept
...puts "teaching to the test" in its place of ignominious distinction

What Happens if I Volunteer
Unlike other Web sites, we insist that authors retain the copyright to their materials.
Of course, you have to give us written permission to publish your materials on our site. This permission covers only placing those materials on our site,and no other rights
You receive complete credit for the materials that you author.
By posting your materials, other teachers will use your materials. So why would you want to share your materials and still retain a copyright?
Here are some reasons:

You can do your part in stemming the tide against over priced corporate content
You can gain exposure for your ideas and skills if you are (or wish to become) a consultant
You can list the materials you share as publications on your resume
You can test whether other teachers like your materials, and if they do, collect your materials into a book or an eBook
You can test whether there is enough interest in your materials for you to start a Web site of your own, or, to develop your own online business

Volunteering in the Classroom Toolkit Open Source Teacher Materials Project will not make you rich. But, you will become important to a lot of teachers and students.
And, if you do not want to publish your materials with Classroom Toolkit, but want to pursue your own Website and your own marketing, we will help you.
To volunteer, or to provide suggestions of any kind, please contact us at:
Mail: Joseph Chmielewski M.S., L.P.C. at Classroom Toolkit

Posted by Classroom Toolkit Newsletter in Open Source at 03:00