

PRODUCT reviews

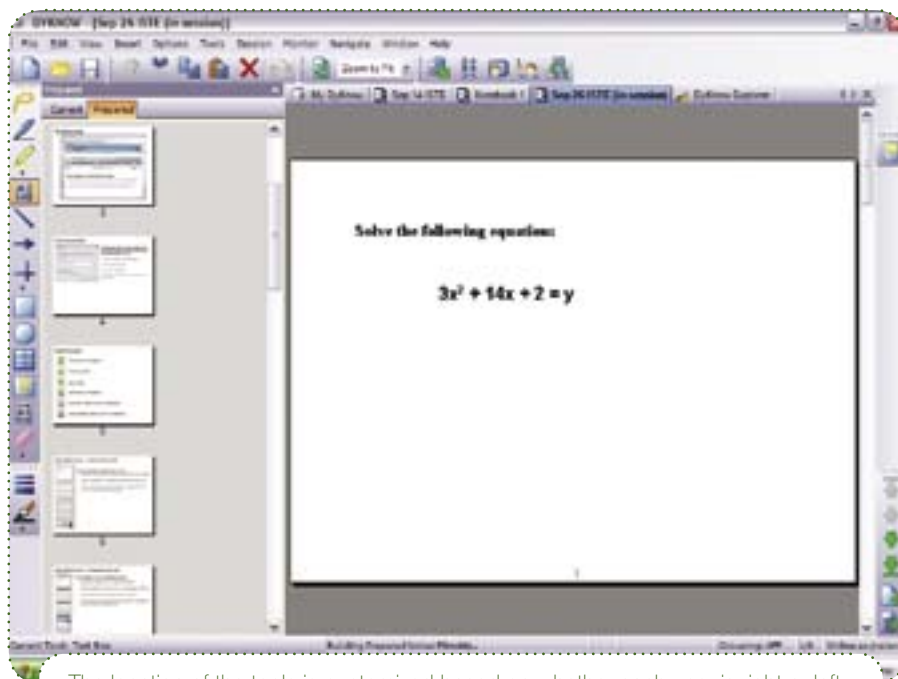
- **DyKnow Vision and Monitor**
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DyKnow Vision and Monitor

By Jennifer Roland

Two programs distributed by the DyKnow corporation work together to make interactive instruction easy for both students and teachers. Based on work by Dave Berque, an associate professor of computer science at DePauw University in Greencastle, Indiana, Vision and Monitor allow teachers to present course material to students and monitor student activity. Berque developed the groupware system, which he called the DePauw Electronic Black Board for Interactive Education, or DEBBIE, to help teachers and students share written information during class. DyKnow, as the system is now known, allows interactivity both in the classroom and in virtual learning situations. In fact, I did most of my testing with a remote instructor and a remote student.

Vision is easy to use both as a student and as a teacher. Easy-to-understand symbols for the main tools ensure that no students will be left behind trying to figure out how to write something on the screen. The software works best on tablet computers and those with tablets hooked to them to allow natural handwriting. The writing tools work with a mouse, but only those with a lot of experience writing and drawing with a mouse can create something intelligible. Thankfully, it is easy to key in text. Simply click on the text tool, then click in the workspace. You can format the text while the text box is



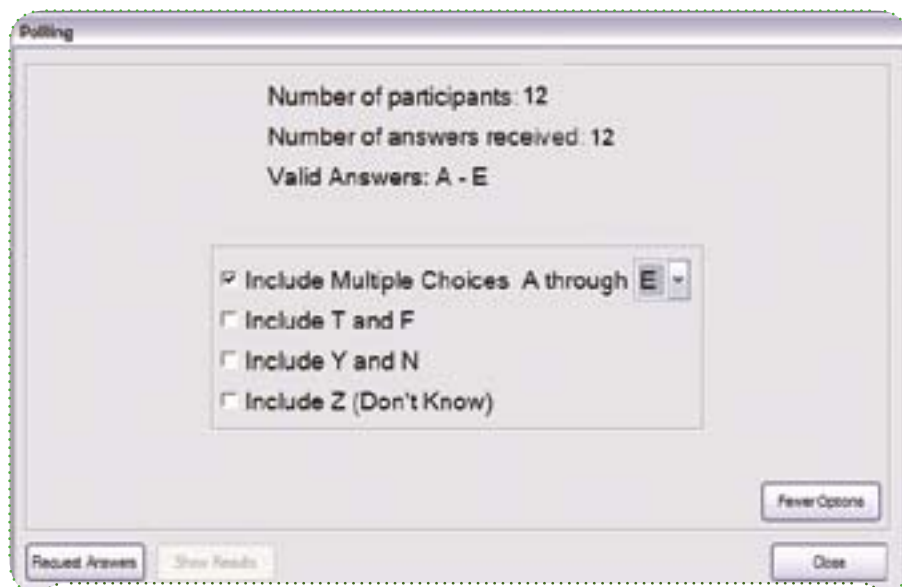
The location of the tools is customized based on whether each user is right or left-handed. Because I am a leftie, my writing tools are on the left. The navigation tools are on the bottom right. The toolbar at the top includes the file management and teacher tools.

active, changing its size, style, and alignment. A few refinements of the text editing tools would help users. First, you cannot apply superscript and subscript styles to text, though you can copy them from another program. Second, you cannot go back into a text box and edit it—once you place the text on the clipboard, it is final.

Students can use the pen or typing tools to annotate the work presented by the teacher. They can save these notes as part of the notebook (the group of materials presented by the teacher) for later review. Students can also use the replay function to follow the steps in their own work or to follow the work of the teacher or other

students. For example, if the teacher solves a math equation, but they move a little fast for the students, students can use the replay function to view the solution until they get it, slowing down and speeding up the replay as necessary. This function works both during the class when the material is presented and later when students revisit the notebook to study or for help completing homework. Users can save notebooks on their personal systems, on the DyKnow server, or on a dedicated server.

Assessment is a strong component of Vision. Teachers can allow a student to take control to solve a problem for the whole class to see, a new way to call a student up to the board. A panel



It is easy for a teacher to ask the whole class multiple choice or true/false questions and view immediate results using the polling tool. The panel management tool (not shown) is a good way to retrieve more complex or open-ended responses from each student.

gether to allow teachers to assess both closed- and open-ended responses to questions. And, on the student side, adding notes to a screen was easy, even though my mouse-based handwriting left a little to be desired. And checking student workstations to ensure that all were on task was quick and easy, with the results displayed textually and as thumbnails of each monitored screen.

The software runs in Windows 2000 or XP only. If you choose to use your own server for saving coursework, it must be a large server with plenty of RAM and running recent Windows server software.

The software is available with multiple pricing structures. An annual license for a single user is \$60 for Vision, \$26 for Monitor, or \$77.50 for both products. For computer lab settings, the annual licenses per computer are \$240 for Vision, \$104 for Monitor, or \$310 for both. Volume discounts and perpetual licenses with annual maintenance and support packages are also available.

More Info: DyKnow software Inc., <http://www.dyknow.com>, 1.888.8.DYKNOW



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management tool allows teachers to retrieve screens from student workstations, as well. These screens could be used either for assessment or demonstration. The replay tool works here, too—teachers can replay a student's solution to test the logic he or she used in solving a problem. Teachers can also poll students to check their understanding of key concepts, using multiple choice or true/false questions. The poll tool shows results textually or in bar or pie graph format. This allows teachers to modify their instruction on the fly—no need to belabor a point students have already figured out.

Monitor allows teachers to view student screens, restrict access to programs on student computers, and even freeze a student workstation if that student is off task. For example, if Web work is essential to the lesson, a teacher could enable DyKnow and the Web browser but lock students out of all other programs to remove the temptation to check e-mail or send instant messages during class. Monitor is bundled with Vision or available separately.

I found both products to be intuitive and easy to use. The polling and panel management tools work to-

Open Source Solutions: TheOpenCD

By Jay Pfaffman

TheOpenCD (<http://theopencd.org>) is a downloadable CD image of open source software (OSS) for Windows. OSS, unlike some other types of free software, will always remain free—the vendor cannot decide at some point in the future

to start charging you after you have become devoted to it. The programs on TheOpenCD have been chosen because they are of high quality and of interest to a broad audience. TheOpenCD includes an easy-to-use installer that has descriptions and screen shots for all of the programs and provides a consistent means for installing them. This makes it a convenient way for teachers and students all to be able to use these

programs not only at school but also at home. Though this CD provides these programs for Windows, most of the programs discussed here are also available for Mac OS.

TheOpenCD 3.0 includes OpenOffice 1.1.4. There isn't space here for a full review of OpenOffice, but the fact that it makes it easy for an entire district to standardize on a single version of the program rather than have different versions on different

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computers depending on when they were purchased is a significant advantage that makes up for many of OpenOffice's shortcomings. A beta version of OpenOffice 2.0 is now available and provides many features not in 1.1.4. Nevertheless, the version on this CD is quite usable and because it reads and writes the Microsoft Office files that are likely used at school, it is especially helpful to students and faculty who do not have Microsoft Office at home. AbiWord is a very small yet full-featured word processor that also reads and writes MS Office and WordPerfect files, so it's a handy tool to have around. AbiWord is small and fast enough to run on a 486 with 16MB of RAM.

One real gem on TheOpenCD is PDFCreator. This program installs as a printer driver, enabling any Windows program to create PDF files. Users simply choose PDFCreator as they would any printer. Though it lacks Acrobat's advanced features such as creating interactive forms, PDFCreator makes creating usable PDF files as easy as printing.

In its Design category, TheOpenCD provides the GIMP, the unfortunately named GNU image manipulation program. For most people, the GIMP is a suitable replacement for Photoshop and has similar metaphors of layers and filters. Moving between



Photoshop and the GIMP is more difficult than moving between Word and OpenOffice Writer, but for the basic image editing chores that teachers and students need to do, the GIMP is more than enough. Similarly, NVU, is a quite capable HTML editor. Like Firefox, it is a descendant of Mozilla, but has been separated and vastly improved. It doesn't have all of the features of Dreamweaver, but few teachers or students need everything Dreamweaver has to offer. TuxPaint is a simple paint program for younger children. Though its superfluous sounds and silly stamps are lost on me, I find its interface for saving and loading files without requiring file names very clever.

TheOpenCD also includes Firefox 1.0.4 and Thunderbird 1.0.2. Most readers will download the most recent versions of these programs, but for our friends and colleagues without high speed Internet access, being able to install these programs from a CD is a real joy. Gaim 1.3.1 is an instant messaging client that lets you connect

to all of your chat services through a single clean interface.

7-Zip is a utility for creating and uncompressing archives in a wide variety of formats. I have found it significantly faster than Windows built-in unzip utility. It is well integrated with Explorer and has a nice file manager. It also creates self-extracting archives.

Notepad2 is a simple replacement for MS Notepad. It provides syntax highlighting and the ability to work with multiple files.

Audacity is a sound editing program. With it you can mix an unlimited number of tracks. It provides effects such as static and hiss removal and can change the speed of a track without changing its pitch. It may not be as full-featured as Apple's Garage Band, but for those without a Mac, it is a very useful tool for producing music.

Celestia is a planetarium program that lets you see the stars not only from Earth, but also from anywhere in the galaxy.



Jay Pfaffman is an assistant professor of instructional technology at the University of Tennessee. He believes open source software provides many conveniences that proprietary software cannot and that

schools have a moral obligation to provide students with software that they have the freedom to use anywhere. When not fussing with computers, he studies ways to increase student engagement and reviews open source software for L&L.

Fujitsu ScanSnap

By J.V. Bolkan

Fujitsu's ScanSnap—it's cute, compact, competent, and wicked fast. Unfortunately, like a Lamborghini, it probably isn't for you, even if you could scrape together the budgetary scratch. A sheetfed scanner, the ScanSnap is essentially a business

card reader on steroids. It is a bold and useful device that should find a niche in the business world, but probably won't make much of splash in the classroom.

If the paperless office is indeed possible, it will be accomplished with equipment like the ScanSnap. The 50-page document feeder, nearly intelligent automated interface, and blazing speed make it a wonderful choice

for archiving all that paper on your desk. By default, the scanner takes your page, determines if it is color or black and white, scans both sides at once, tosses any blank pages, correctly orients any upside down or sideways scans, and creates a thoroughly modern, highly compressed Adobe PDF version of the page. It does that all at 15 pages a minute (30 if you count both sides of each page) at the default



150 dpi setting. It can handle originals as small as business cards, but no larger than A4 (basically your 8.5" x 11" paper).

With a USB 2.0 interface, (compatible with USB 1.1, but at a cost in speed) and the bundled Adobe Acrobat 7.0 standard edition, and a simple installation disk including the scanner's utility applications, the package can be up and running in minutes. You will need Windows XP or 2000 SP 2 to use Acrobat 7.0. Without Acrobat, the scanner will work with Windows versions as far back as Win 98, but you lose almost all the advantages of the device. Fujitsu has just released a Macintosh OS X version of the ScanSnap that is essentially identical to the model reviewed here.

As a traditional scanner, for converting art to digital content, the ScanSnap simply isn't up to snuff, especially considering the hefty \$495 (U.S.) list price. Even at the lowest street price I could find (\$399), the output quality doesn't match the investment in this regard. With a relatively low 600 dpi maximum scanning resolution, even your budget \$50 flatbed scanner will deliver superior images. There is no TWAIN driver, so you can't control the scanner directly from your image editing program.

Surprisingly, the ScanSnap doesn't make up for its imaging deficiencies with top-flight OCR capabilities. Although the CardMinder 2.0 application does include OCR capabilities, they are only suitable for their designed purpose of transferring contact information into a salesperson's contact management program.

The PDF scheme is truly wonderful. It is also responsible for most of the scanner's high price. The full Standard version of Acrobat 7.0 included with the ScanSnap can cost more than \$300, or 75% of the street cost!

The ScanSnap Manager, Organizer, CardMinder, and PDF Thumbnail View applications are all well designed and simple to use programs. For default scanning however, you don't even need them—simply press the big green Scan button on the device and zip, your page has been captured. Automatically, ScanSnap Organizer launches and you'll be able to view a thumbnail version of your PDF. The simplicity is great, and PDF is a fantastic format for many document uses.

Sheetfed scanners such as the ScanSnap do have inherent limitations. You can't scan bound content such as books and magazines, portions of oversize originals, or other oddly shaped content. Because the original is pulled over the scanning

elements, precision is also lower than a flatbed scanner where the original remains stationary and the scanning elements move on stable guides. The biggest drawback of a sheetfed scanner is its inability to provide previews of content.

Even with its relatively hefty price and business rather than classroom orientation, the ScanSnap would be a wonderful device to have if you're responsible for posting lots of printed content to the Internet. PDF is perhaps the preferred method of archiving content on the Web. In fact, this article, along with nearly every other page in this issue, will be available on the ISTE Web site in PDF.

In short, the ScanSnap would be a wonderful device to have on your desktop, but in the real world of the classroom, budget and device flexibility concerns make it difficult to recommend. Administrators and Web specialists would certainly find it much more suited to the tasks they are likely to encounter. However, better bundled OCR capabilities would be needed even for those specialists.



J.V. Bolkan is L&L's resident geek and a senior editor with a penchant for gadgets.

COMING NEXT ISSUE IN L&L

Laptop Programs Updates

In April 2004, Pamela Livingston and Howard Levin described the one-to-one laptop programs in their schools, middle and high schools, respectively. Next month, they give us an update. What has changed? What has stayed the same? How has technology use developed over the past year and a half?

Online Professional Development

Dianne Smith and Roger Martin discuss how adding online components to their professional development offerings increased teacher participation.

Developing Powerful Researchers

Nancy Messmer presents a model for creating online research projects for students that help them develop solid research skills.

