is&t

News about information services and technology throughout MIT

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Inside! Schedules of Hands-On Computer Training Courses and Free Computer Events

An Accurate Count? Voting Technology in the 2008 Elections

• **Robyn Fizz**

The 2000 presidential election is remembered for Florida's hanging chads and highly controversial recount. The 2004 presidential election was similarly contentious, with concerns about improper voting procedures in several states, including the swing state of Ohio. Aspects of the entire voting process were called into question, from voter registration, to the unequal distribution of voting machines, to the accuracy of the count.

Will the voting process be fairer and the final tally more accurate in 2008? And how will voting technology come into play?

Professor Charles Stewart III, Head of the MIT Department of Political Science and a member of the CalTech/MIT Voting Technology Project, gave *is&t* an overview of what factors might affect election results in 2008. The Voting Technology Project, established in the wake of 2000's controversial recount, evaluates the reliability of U.S. voting systems and proposes principles for the design of new voting technologies.

According to Stewart, there *has* been progress since 2000, but because each state manages its own voting process, there will never be uniform national standards.

In 2002, Congress enacted the Help America Vote Act (HAVA), which funded the replacement of mechanical lever and punch-card systems (goodbye, hanging chads). Some precincts bought direct-recording electronic (DRE) voting machines, which display ballots to voters on touchscreens. A voter's electronic input is tabulated by software, and often backed up by a paper audit trail that the voter can verify. Optical scan systems also continue to be popular: individuals mark their votes on paper ballots, which are read into electronic scanners that tally the results. The paper ballots can be used for manual recounts, if needed.

In addition to this move to modern voting equipment, Stewart notes that the National Institute of Standards and Technology (NIST; **www.nist.gov**), in partnership with the U.S Election Assistance Commission (EAC; **www.eac.gov**), has developed voluntary voting system guidelines. While states don't want to cede control of elections to the Federal government, they do recognize the value of striving for standards. As a consequence, most states operate voting machines certified by the EAC.

So all is well? Not quite.

One Country, Fifty Standards

The design of paper and electronic ballots isn't uniform. Each state (or in some cases, each municipality in a state) creates its own ballots. Usability testing isn't required, so on Election Day some voters may still get confused by unclear ballot layouts.

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Voting Technology

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What's more, with 50 different state standards for voting, election software needs to be customized for each state. This lack of uniformity can lead to errors in the software, which is usually written by one of the two large vendors of voting systems – Premier (formerly Diebold) and eSys. These systems are proprietary, which doesn't encourage either innovation or streamlined code.

Stewart notes that Premier recently discovered a flaw in its software for the 2008 elections. The vendor has come up with a fix, but it requires election officials to follow a multi-step correction procedure. This is far from ideal, since most staff at the polls do not have extensive computer skills.

The Voting Technology Project recommends standardizing all the components of voting systems – CPUs, touchscreens, and scanners. This would allow smaller vendors to compete and could lead to improvements in voting technology. But this recommendation hasn't won favor with election officials, who prefer to deal with one vendor.

Counting the Votes

Stewart acknowledges that hacking into electronic voting machines remains a risk, and that physical security measures are still the main means of protecting these systems.

He also warns that paper audit trails can instill a false sense of security. Experiments that have tried to reconcile paper trails with e-votes do not match up. Most of the discrepancies are likely due not to hacking but to mechanical errors. Paper audits are produced by printers, which can break, get jammed, and so on. Meanwhile, voters who can view their paper audit in the voting booth often find it cryptic to read and don't verify its accuracy.

Internet Voting

If proprietary voting systems have their share of problems, what about Internet voting? Why isn't that an option in 2008?

One primary concern is the security of the channel. Some people draw an analogy between the U.S. banking system, which handles millions of transactions a day, and online voting. But this analogy doesn't hold. The banking system has built-in redundancies and, even more important, it is not anonymous. Anonymity and voting go hand in hand. You should be able to vote, but the system should not track who you voted for. For now, anonymity online means that votes cannot be verified.

Internet voting also raises concerns about maintaining the secrecy of votes. If you vote at home (or in a nursing home), what guarantees that you were the person who voted? Others could co-opt your vote or coerce you to vote a certain way.

Project Insights

When the Voting Technology Project got under way, says Stewart, "We thought we could solve voting problems by designing the best-ever voting machine or creating the right standards. With time, we've come to appreciate that the primary problems are around process and rules. Technology is not the panacea. The key to success is to design voting systems that interact with human beings."

Current MIT participants in the project, in addition to Stewart, include faculty member Ron Rivest and affiliates Steve Ansolabehere and Ted Selker. Rivest is an expert in the fields of cryptography and computer and network security. Ansolabehere examines the role of rules, like voter ID, in the election process. Selker's research focuses on aspects of voting, including accessibility, auditing, and methodology.

To learn more about the work of the Voting Technology Project, visit its web site at **www.votingtechnologyproject.org**. §

Choice Web Sites for the MIT Community

Members of the MIT community often turn to the Web to access services on campus. To make the most of these resources, it helps to know they're out there! Here are three MIT links you may want to bookmark.

Human Resources: MIT Job Alerts

To be notified via email of new jobs at MIT that match your career interests, visit the Staffing Services page at **hrweb.mit.edu/staffing**. Click on the Job Alert link and fill out the online form. You can create as many job alerts as you'd like, searching by organization and career area. To unsubscribe, click on the link provided in job alert emails.

Libraries: Vera Multi-Search

Vera Multi-Search (**libraries.mit.edu/vera**) helps you quickly find journal articles and other materials. You can search for your favorite e-journals or databases by title and link directly to them. Or you can search for articles within about 40 library research databases all at once, grouped into sets by discipline.

The Libraries subscribe to over 500 specialized research databases. To see the databases for specific subjects, visit **libraries.mit.edu/research-guides**. To learn more about Vera Multi-Search, go to **libraries.mit.edu/multi/faq.html**.

Facilities: Online Forms

In November, Facilities is launching an enhanced SAPweb page that will consolidate the ordering of many of its services. From the new Building Services tab at **web.mit.edu/sapweb**, you'll be able to request a building repair, arrange for a carpet cleaning or office furniture move, and much more. As always, there will be no charge for basic services. And when you request a fee-based service, you'll no longer have to go through the step of selecting Facilities as an Internal Provider.

For more information, visit **web.mit.edu/facilities/services**. §

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Software Spotlight

References, Please: Three Programs That Can Manage Your Citations

• Peter Cohn

If you're a researcher or student today, you have access to more information from more places than ever before. That's a great benefit, but can also lead to information overload. Fortunately, bibliographic software can help you manage this information, keep it in one place, and use it as you write.

The MIT Libraries provide support for three bibliographic management applications: RefWorks, EndNote, and Zotero. These programs let you export citations from Barton, Google Scholar, and library databases such as Web of Science, PubMed, and ProQuest. These citations can include abstracts, when available. You can also attach PDFs and other files to your citations and enter research or study notes.

While storing citations is useful, these programs score the most points for automating one of the most tedious parts of the writing process: formatting citations and bibliographies. You can insert citations as you type and, as sources are cited, your bibliography gets built in real time. These programs can format citations and bibliographies in hundreds of different styles to meet your preferences or journal requirements.

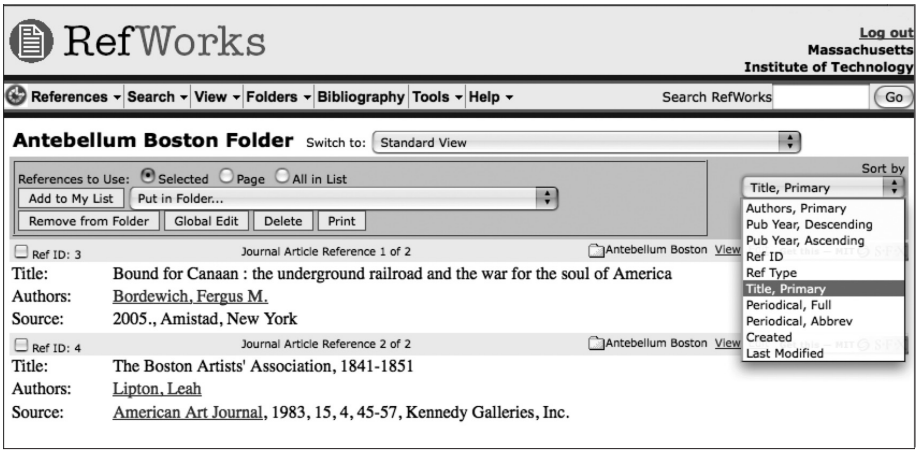
Comparing the Programs

RefWorks, EndNote, and Zotero all have strengths, limitations, and unique features. For an in-depth comparison, view the chart prepared by the MIT Libraries and posted at **libraries.mit.edu/help/bibliography**.

Here's a brief summary of what each program has to offer:

RefWorks

RefWorks is a web-based product that the Libraries provide at no cost to the MIT community through a site license. You can create accounts for different projects, including shared accounts for group work.



RefWorks lets you save your citations in folders and sort them in multiple ways.

Because RefWorks is web-based, you can get to your RefWorks accounts from anywhere, as long as you have an Internet connection.

RefWorks is fairly easy to learn, but for the finer points, you may want to check out the various online user guides and demos.

EndNote

To use EndNote, you need to buy the software and install it on your computer. (GovConnection, an MIT ECAT vendor, sells a student edition, as well as standalone and 5-user packages for Macintosh and Windows; you can also buy EndNote at The Coop.)

While EndNote can be more complicated to learn than RefWorks, it offers extensive formatting options and integrates very well with Microsoft Word. This can make it a good choice for major research projects, both in terms of customization and its ability to manage large libraries of 1000 or more citations.

Zotero

Zotero is a free extension for the Firefox browser that "senses" when you are looking at an item – be it a web page, article, or image – and gives you the option to save a reference to it. Zotero also lets you save snapshots of web pages, highlight text and take notes on a page, and assign tags.

Zotero is an open-source program that lets you import references for non-traditional sources, like wikis, web sites, and video. By the same token, as the new kid on the block, Zotero still has some rough edges. You may not want to use it to write your thesis or to create complex bibliographies, since it doesn't support as many bibliographic formats as RefWorks or EndNote.

Zotero has a simple design and a modest learning curve. If you need help, though, there are several online guides and demos.

Making the Right Choice

So, which program is right for you? It depends on the work you're doing, who you're working with, and personal preference. If your colleagues are using RefWorks to share citations, that may be the main consideration.

You may also find that it makes sense to use different programs for different projects. Since records can be transferred from one program to another, you're not limited to choosing only one of them.

Help and Support

The MIT Libraries have created help pages for all three of the bibliographic management applications they support. You can find these guides, along with handouts from past training sessions, at **libraries.mit.edu/help**. In addition, each application has its own set of help pages.

The Libraries also offer training sessions throughout the year on how to use these applications. Session descriptions are posted on the Libraries' News Blog at **news-libraries.mit.edu/blog**. For help with any of these programs, use the Libraries' Ask Us! service at **libraries.mit.edu/ask-us**. §

Network Notes

MIT Touchstone Will Expand Options for Web Authentication

• Paul Hill

Soon MIT users will be able to access web applications at many secure sites using their Kerberos account via MIT Touchstone. MIT Touchstone is IS&T's newest system for web authentication.

Touchstone is designed to be very flexible. MIT users can authenticate to any Touchstone-enabled application by entering their Kerberos username and password, using existing Kerberos tickets, or using certificates. MIT Touchstone also provides support for users without Kerberos accounts.

Successful Pilots

One portion of MIT Touchstone has been running since the fall of 2007. During the past year MIT users of the Stellar course management system and the wikis.mit.edu service have been able to authenticate to these applications via Touchstone when they don't have an MIT certificate installed (for example, when using a public machine), or when they have chosen not to present a certificate. By next spring, Touchstone will be the default authentication mechanism for Stellar and wikis.mit.edu.

InCommon Federation

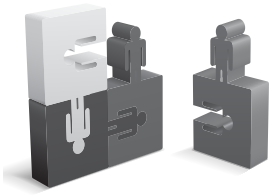
Some of Touchstone's capabilities are made possible by MIT's membership in the InCommon Federation. Like other federations, this association of organizations uses a common set of attributes, practices, and policies to exchange information about its users and resources in order to enable collaborations and transactions.

Within a federation, each organization continues to manage its own identities, but is capable of securely sharing and accepting identities and credentials from other organizations. Participants in federated systems may use different technologies with different security approaches and programming models, yet can still integrate their businesses without substantial customization.

The InCommon Federation is the largest higher-education authentication federation in the U.S. It has about 100 member organizations, representing more than 1.7 million users. For a list of the members, go to **www.incommonfederation.org**.

Collaboration

Using a technique called Federated Authentication, Touchstone-enabled applications can support users who don't have an MIT Kerberos account but are recognized through the InCommon Federation.



For people who don't have an MIT Kerberos username or an account with any member of the InCommon Federation, IS&T has created a Collaboration Account management system as part of Touchstone. Individuals can self-register for a Collaboration Account using their email address. The Collaboration Account can then be used to authenticate to Touchstone-enabled accounts, at MIT and elsewhere. Users who have a Collaboration Account can also associate an OpenID identity **(openid.net)** with their account and then use OpenID to authenticate to Touchstone-enabled applications.

With either Federated Authentication or Collaboration Accounts, individuals must be granted permissions within any given application in order to use it.

Next Steps and Support

IS&T plans to enable the InCommon functionality at MIT later this fall.

Meanwhile, IS&T has more applications in the pipeline that will support Touchstone. MIT students will soon be able to download software development tools from Microsoft at no charge after being verified by Touchstone. And the teamspaces.mit.edu pilot, which enables virtual collaboration, will be Touchstone-enabled.

IS&T is also offering support to developers at MIT who want to integrate Touchstone into their web applications.

For more information about Touchstone, see **mit.edu/touchstone**. §

Bits and Bytes

This column presents announcements about IS&T-supported software. For more information about recent releases, see **web.mit.edu/swrt**.

Support for Windows XP and Vista Service Packs

After evaluation and testing in the MIT environment, IS&T recommends both Service Pack 3 (SP3) for Windows XP (32-bit versions) and Service Pack 1 (SP1) for Windows Vista. SP3 is Microsoft's last Service Pack for Windows XP.

Both Service Packs contain all previously released updates for their respective operating systems, including security updates and hotfixes. They are available via Windows Update, MIT's Windows Automatic Update Service (WAUS), and the Microsoft Download Center. For more information, visit these product pages:

Windows XP Professional
itinfo.mit.edu/product.php?vid=642
Windows Vista
itinfo.mit.edu/product.php?vid=735

If you have questions about either Service Pack, contact the Computing Help Desk at 617.253.1101 or computing-help@mit.edu.

New Versions of Stretch Break Available

In collaboration with MIT's Environment, Health, and Safety Office, IS&T has released new versions of Stretch Break, the ergonomic stretching and typing break program from Para Technologies. Stretch Break 6.3 for Windows includes support for Windows Vista; Stretch Break 6.1 for the Mac includes support for Mac OS X 10.5 (Leopard).

Users can now choose from 36 stretches and 21 ergonomic reminder messages, and select the time interval between breaks.

For download, installation, and setup instructions, go to

Stretch Break Pro 6.3 for Windows
itinfo.mit.edu/product.php?vid=812

Stretch Break Pro 6.1 for Macintosh
itinfo.mit.edu/product.php?vid=813. §

Safe Computing

IS&T Campaigns for Cyber Security

• **Monique Yeaton**

October is National Cyber Security Awareness Month. States, universities, and the private sector work together to educate the public and provide tools that promote safe online activities. There's a lot to stay on top of: cyber threats continue to evolve, and new legislation and policies are being passed regarding data protection and the reporting of breaches.

At MIT, IS&T has been active in coordinating a month-long cyber security awareness campaign. This has included messages on password strength and privacy, knowing how to deflect phishing attacks, and using file-sharing software safely and within copyright guidelines.

You can find these messages on posters and plasma screens around campus.

To conclude its campaign, IS&T has teamed up with the Department of Facilities and the Audit Division to sponsor Security Awareness Day on November 5.

Be Aware, Be Very Aware

The main event on Security Awareness Day will be an afternoon of presentations by security professionals, held in the Media Lab's Bartos Theater (E15-070) from 2 to 5 pm. The keynote speaker will be Scott Bradner, Technology Security Officer at Harvard University. Bradner will discuss important cyber security issues of the day and what to be on the lookout for.

John DiFava, Chief of Police and Director of Facilities Operations and Security at MIT, will talk about physical security on campus and best practices for protecting electronic equipment and other information assets.

Tom Jagatic, a member of the IT Security Support Team in IS&T, has done research on social engineering threats. He will share his knowledge of the latest trends in phishing: using email and legitimate-looking web sites to trick individuals into divulging personal information, such as Social Security or credit card numbers.

In addition to these speakers, the event will include informational tables, products from partner vendors, prizes, giveaways, and light refreshments for attendees. For details, see the IT Security at MIT page at **web.mit.edu/security**. §

IS&T Training Videos Provide a New Way to Learn About Software

• **Kevin James and Esther Yanow**

IS&T now offers free videos as another way to learn about software. If you can't attend a training class, but want to get an overview of an application's features or pick up some useful tips, these videos can be your guides. No matter where you are – at work, at home, or on the road – all you need to view them is a web browser with the free Adobe Flash player installed (**www.adobe.com/products/flashplayer**).

Some of the videos provide step-by-step instruction. For example, you can watch how to create a pivot table in Excel, while trying out the same steps yourself. Other videos offer guided tours – such as a look at new features and navigation in Windows Vista. Still others provide online versions of presentations – for example, an overview of information security. All of the videos are about three to five minutes in length, and most have closed captioning.

Some of the IS&T training videos can be helpful as a way to recall a task that you do only once or twice a year – such as creating an extended vacation greeting on your MITvoip phone. You can review a video as many times as you like.

To find out what videos are available, go to **web.mit.edu/ist/topics/training/demos**. To view any of the videos, click on its title.

Captivate

IS&T staff create their training videos with Captivate, Adobe's application for developing software simulations. Captivate outputs Flash files.

If you'd like to make your own software simulations, you can get up to speed by taking IS&T's Captivate 3 Basics class ($175) on January 29. In this hands-on course, you'll learn how to create video content and develop your editing skills. Once you've created a software simulation, you can post it on the Web or put it on a CD. §

Consistent Rates for IS&T Training Courses

As a service to the community, IS&T offers Basics and New Features courses for core applications at no cost. Element K online training is also free, as are the IS&T training videos.

Starting November 1, IS&T will charge a fee for intermediate and advanced FileMaker Pro courses, and offer its PowerPoint Basics class at no cost. These changes are being made to ensure a consistent fee structure for IS&T's hands-on courses. Rates are based on the number of hours of instruction, as follows:

12 hours (2-day)	$340
9 hours (1.5-day)	$255
6 hours (1-day)	$175
3 hours (half-day)	$ 90
2 hours	$ 60

For a list of IS&T courses, see the Computer Training at MIT page at **web.mit.edu/ist/topics/training**.

Tech Tips: Computing Help

Advice on How to Get the Help You Need

If you work with computers, sooner or later you're going to need help. You may get a repeated error message, need assistance with a network connection or printing problem, or reach an impasse using a program. Where can you turn for answers?

Most applications include extensive built-in help, so that's a good place to start if your question is software-related. You may also want to look at vendor materials – in print or on the Web. Information Services and Technology (IS&T) maintains online documentation for supported software at **web.mit.edu/ist/software** and an online FAQ for information technology (IT) topics at **itinfo.mit.edu/answer**.

Still stuck? If your department or lab has its own IT support staff, you may want to tap their expertise. IS&T's Computing Help Desk also offers assistance in a variety of ways. For a review of Help Desk services, as well as self-help tools and other resources, visit **web.mit.edu/ist/helpdesk**. This web page includes a Request Help link that will enable you to describe your question in detail and submit it directly to Request Tracker, the Help Desk's ticket tracking system. You can use this system to review and update your existing requests.

You can also call the Computing Help Desk at 617.253.1101 or send email to computing-help@mit.edu.

Fruitful Interactions

By following a few simple guidelines, you can make the most of your interactions with the Computing Help Desk and other technical support venues. While many of the tips here focus on interactions over the phone, some apply to submitting information via email or Request Tracker.

All Help Desk consultants have areas of expertise. When you call the Computing Help Desk, you will talk to a consultant with wide-ranging computer experience; he or she may ask a variety of questions and offer some things to try. If resolution requires expertise that the answering consultant doesn't have, he or she may need to bring your case to the attention of a consultant who has that expertise. No matter who answers your call, be aware that some technology questions have quick answers while others take a bit longer to diagnose and resolve.

Details help. Feel free to describe your IT problem in detail, including information about your computer configuration and answers to basic troubleshooting questions (see table below). For example, if you're experiencing difficulties with email, tell the consultant which email program and operating system you're using and how you're connected to the network. Also mention any recent changes to your computer (such as installing or upgrading software).

If you don't know the answer to a consultant's question, it's okay to say so. Guessing at the answer can complicate the troubleshooting process.

All calls to the Help Desk are important; some are more urgent than others. Everyone who calls the Computing Help Desk wants his or her problem resolved as quickly as possible. Please keep in mind that the Help Desk is a shared community resource. The consultants work hard to address everyone's needs in a timely manner. Most calls are answered within 90 seconds, and staff usually respond to voice mail messages within 30 minutes.

Make sure you are heard and understood. MIT is a diverse, multicultural community, and language barriers can sometimes cause confusion. Please don't be offended if a consultant asks you to repeat something or asks you to speak more slowly.

Also, while it may be easier for you to use the Speaker Phone feature, it's difficult for Help Desk staff to understand you when you do. Whenever possible, use your handset or headset. Cell phone reception can also be poor, depending on your coverage area. Please cooperate if a consultant asks you to call back using another phone.

Plan ahead to get the help you need. If you are going on a trip and taking a laptop, test it at least a week in advance. Make sure all your applications and network connections work. It's easier for consultants to resolve issues when there's a reasonable amount of time to explore solutions. A few hours notice may not be enough.

The Help Desk can fix many things, but not everything. Some issues are beyond the ability of the Help Desk to resolve (e.g., your online banking web site won't work). If you're having difficulties with software that IS&T doesn't support, the consulting staff will try to help, but their experience with that software will be limited.

To find out what software is supported at MIT, start at **web.mit.edu/ist/topics/software**. §

Helpful Information to Have on Hand

The Help Desk will commonly ask for answers to the following questions.

1. What were you trying to do? Have you been able to do this before? If so, when was the last time it worked successfully? Has anything changed on your system recently?
2. What steps did you perform in trying to do this?
3. What were the results of those steps? Can you describe the symptoms exactly, including any error messages?
4. What is the configuration of your system?
   - Computer make and model (e.g., Dell Latitude D630)
   - Operating system and version number (e.g., Windows XP with Service Pack 3)
   - Your physical location (e.g., at MIT or working via a home network)
   - For problems that appear to be software-related, the application's name and version number (e.g., Microsoft Word 2007)

Administrative Aspects

The Next Generation: MIT's Student System Looks to the Future

• JoAnne Stevenson

Students are the pulse of MIT. The Student Information System (SIS) that supports them needs to be robust and responsive. It impacts over 45,000 users in every aspect of MIT's academic mission, including registration, course scheduling, housing, student accounts, financial aid, and admissions.

MITSIS, the current student system at the Institute, is based on aging technology. This has made it challenging for the staff who develop MITSIS (and WebSIS, its companion self-service web site) to keep up with demands for new features.

Aware of these challenges, MIT initiated a year-long Student System VISION Study in the spring of 2007. The study's overarching goal was to learn from the MIT community how the next-generation student system could

- Enhance communication and collaboration
- Support business processes essential to the Institute's education mission
- Adapt to changes in academic policy and educational innovations

The VISION Team conducted workshops with more than 160 members of the MIT community and surveyed more than 2,700 students. The team also talked with members of the Undergraduate Educational Commons Task Force and colleagues at peer schools with new student systems.

The study's final report is now available at **https://web.mit.edu/stu-future/www**.

The Vision

Study participants anticipate that rapid advances in technology will bring about significant changes in how the community shares information, uses media, and solves problems. In step with these changes, the envisioned student information system will provide

- Seamless delivery of services through a single point of entry
- System access through a variety of end-user devices
- Self-service, with around-the-clock availability
- Online personalized help
- Advising tools that support face-to-face interactions with students
- Tools for delivering messages and alerts

Such a system will call for a high level of security, flexibility, and modularity.

In the months ahead, the VISION Team will launch a set of planning and assessment projects to better understand educational needs and the resources required. The overall approach for this complex system implementation will involve phased-in component replacement over five to seven years. System components may include commercial, custom-built, and open-source applications.

The VISION Team recommends that MIT explore the Kuali Student community-source initiative (**student.kuali.org**). Kuali is a consortium of universities committed to creating a next-generation student information system centered on the needs of students. Kuali's modular, open-source, standards-based design enables integration and interoperability with commercial and open-source applications. This flexible architectural approach aligns well with MIT's vision.

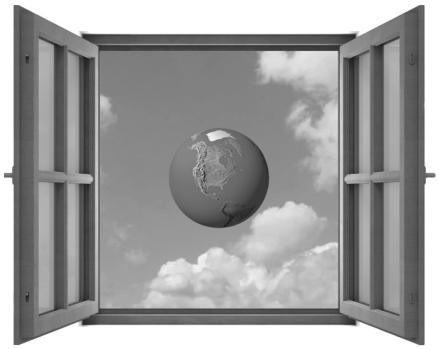
Into the Future

With active participation from the community, the VISION study has set the stage for a student system that can support MIT's educational mission over the next 20 years or more. As the new student system design takes shape and modules become available, the project team will provide updates to the community.

Sponsors for the Student System VISION study included Dan Hastings, Dean of Undergraduate Education; Steve Lerman, Dean of Graduate Education; Larry Benedict, former Dean for Student Life; and Jerry Grochow, Vice President for Information Services and Technology. §

Opening Up Education Foresees a New Culture of Learning

It's hot off the press and fresh on the Web. The Carnegie Foundation for the Advancement of Teaching and The MIT Press have adopted a simultaneous publication strategy for their new book, *Opening Up Education: The Collective Advancement of Education through Open Technology, Open Content, and Open Knowledge.*



It's available as a free download from The MIT Press web site (**mitpress.mit.edu/opening_up_education**) under a Creative Commons use license, and is also for sale in hard copy.

Through this innovative publication strategy, Carnegie and The MIT Press hope to promote discussion about new models of education in a Web 3.0 world. This is in keeping with the book's theme of open education – the free sharing of knowledge over the Internet, along with the teaching methods and technologies that can spur a global, collaborative "learning commons."

Opening Up Education features 30 essays by leaders and thinkers in the open education movement. The authors offer their reflections, examine challenges, and delve into the implications of a movement that has the potential to reinvent how we learn.

MIT Contributions

MIT has been a leader in the open education movement, through initiatives such as MIT OpenCourseWare (**ocw.mit.edu**) and iLabs (**ilab.mit.edu**). *Opening Up Education* devotes a chapter to each. The book also features several MIT contributors, including Vijay Kumar, Steve Lerman, Phil Long, Anne Margulies, and Shigeru Miyagawa. Kumar, the Director of MIT's Office of Educational Innovation and Technology, is also one of the book's editors, along with Toru Iiyoshi of Carnegie. §

Getting Help

If you don't know where to get help for your computer, network, or telephone problems, dial one of the help lines listed to the right.

If you prefer to use email, you can send your questions to the corresponding email addresses. (When logged into Athena, you can also use the **olc** command to send questions to Athena's online consultants.)

You can also submit a question online via the Request Tracker link on the Getting Help page at **web.mit.edu/ist/help**.

For help with...	Dial...	Or send a message to...
General computing questions Macintosh, Windows, network/ connectivity, business applications, computer buying advice, repairs	617.253.1101	computing-help@mit.edu
Athena computing environment	617.253.4435	olc@mit.edu
Disabilities and computing	617.253.7808	atic@mit.edu
Telephone support and repairs Traditional and MITvoip phones	617.253.4357	telephone-help@mit.edu
Traditional phone moves/changes For use by AOs/DLC administrators	617.253.3670	telecom-csr@mit.edu
Unix/Linux	617.253.1103	unix-linux-help@mit.edu

Surf Sites: Political Prospects

The 2008 elections are around the corner. Are you ready to vote? If you need practical information, such as the location of your polling place, see VOTE411. The other sites listed here provide political news, commentary, and analysis. Check them out to compare candidates, peruse the latest polls, and get the straight story.

If you're a political junkie on the lookout for blogs of all stripes, visit About.com's US Politics Blogroll at **uspolitics.about.com/od/blogs/Blogroll.htm**.

CNN Politics.com
cnn.com/POLITICS

C-SPAN – Capitol Hill, The White House and National Politics
c-span.org

Election 2008: NPR
npr.org/templates/topics/topic.php?topicid=1102

Fact Check – Holding Politicians Accountable
factcheck.org

OpenSecrets.org – Center for Responsive Politics
opensecrets.org

RealClearPolitics – Opinions, News, Analysis, Videos and Polls
realclearpolitics.com

VOTE411.org – Election Information You Need
vote411.org

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