

PRODUCT reviews

- **Making History: The Calm and the Storm**
- **ALEKS Math Assessment**
- **The GIMP: GNU Image Manipulation Program**
- **Toshiba Satellite Convertable Tablet PC**

Making History: The Calm and the Storm

By David Hicks and Melissa Lisanti

Making History: The Calm and the Storm is a PC-based World War II single or multiplayer simulation game marketed to high school and college history teachers for use with students. The game allows players to choose from 10 world powers and to assume the role of that nation's leadership as they negotiate and compete against each other within six scenarios.

The game begins with the "Limits of Peace" as nations emerge from the global depression with distinct and conflicting national ideologies through five more chronological scenarios. Players make decisions on military, domestic, economic, and diplomatic issues to meet objectives for their nation. They also take turns making key decisions, while securing resources and maneuvering troops on a Risk-type map. Several features inside the game play provide considerable information on the historical context; a reference book, a time line, background information, and the missions for each nation are readily accessible to students.

There is a great deal to this simulation, including lesson plans provided online. The software allows teachers and students to generate reports and provides feedback to gauge progress within the game. The developers are keen to highlight the game's



Each nation is provided with key goals. Scores are provided as to how well each player meets his or her goals. Upon completing their turn, players are provided with an update of key world events.

educational nature, exemplified by the "learn something" motto on the packaging. However, in an attempt to make each scenario as educational as possible, the amount of information players must process to play the game effectively could be overwhelming for those playing within a short time frame. Beyond recognizing the complexity of leading a nation in a time of tension and conflict, it is not readily apparent what specific learnings will occur. In fact, after playing for five hours, we felt we had just experienced Risk on steroids, while also reaching the tipping point of cognitive load.

The game requires extensive prior knowledge beyond your typical high school history classroom and college

survey course. The game play is not entirely intuitive, and players will discover new screens and tools far into their sessions. The instruction manual provides assistance, but its length and density may not be attractive to student players. Players could overlook parts of the scenario if not provided with adequate time to explore the game. Players will also need to be patient with load time, an issue the developers recognize within their manual: "Be patient, when you click a button. Do not click repeatedly! This only slows down the response of the game. There is a lot going on 'under the covers' in the game."

What makes the game intriguing for players is the ability to craft decisions

from a myriad of options in whatever combinations they desire: offering treaties, making trade agreements, raising taxes, building factories, and moving troops. Once their decisions are made, they complete their turn and await the results, displayed as news headlines on their screens. However, there are times when the effects of decisions seem arbitrary and little contextualizing explanation is provided to help students make connections between their decisions and the effects on the world. Students will be mystified when France signs a non-aggression pact with them *and* declares war on them in the same turn. If this happens consistently, students may well decide that the com-

puter responses are capricious or that they are fighting the inevitability of history. In either case, the motivation to make decisions methodically and subsequently to contrast these decisions with what actually occurred may be lost.

Making History provides hours of entertainment for the strategy game or World War II enthusiast. Its ability to augment high school and college classroom curriculum, however, is limited to students with the enthusiasm to play the game methodically or to instructors who can make a significant time investment and ensure that students take the time to compare history with their own decisions.

Requirements

Windows XP or 2000
Pentium III or Athlon 1.0 GHz Processor
512 MB RAM/850 MB available hard drive space

Muzzy Lane Software

<http://www.muzzylane.com>
List Price: \$39.99 per CD



David Hicks is an associate professor of curriculum and instruction (history and social science education) at Virginia Tech. His research interests include examining how concepts of citizenship and the integration of technology can influence how teachers approach the teaching and learning of history.



Melissa Lisanti is chair of the social studies department at Christiansburg Middle School, Montgomery County Public Schools, in Virginia. She is a national board certified teacher.

ALEKS Math Assessment

By David L. Johnson

All math teachers face the challenge of responding to students individually in the classroom, assessing each student's skills, and providing skill-appropriate practice and feedback. Of course, this is nearly impossible without a technology tool such as ALEKS (Assessment and Learning in Knowledge Spaces), a math program for students and assessment management program for teachers. Developed from knowledge space theory, ALEKS can accurately assess the exact knowledge state of students in any mathematics subject area, guide them in the selection of new materials, and record their progress toward mastery of the content.

A *knowledge space* is a collection of specific topic items in a knowledge domain. A *knowledge state* is the list of topics the student has learned. The possible knowledge state combinations of 100 to 300 topics in a domain such as Middle School Math 2 is extremely large, so the challenge is to

One of about 20 assessment questions students must answer before beginning the Middle School Math 2 module

determine the next step for a student that will generate a high likelihood of success. In knowledge space theory, this new knowledge state is called the *outer fringe*. It is identical to the old knowledge state but contains exactly one new item. ALEKS employs a guidance system that helps students move to the outer fringe.

Students log in online and begin a module by taking an assessment. Every assessment is unique; a student can't predict the sequence of questions or learn the answers ahead of time. Assessment questions ensure comprehensive coverage of the subject, and the system selects each sub-

sequent question based on the answers to all previous questions. There are no multiple choice questions, thus preventing the student from inducing an answer from the choices given. ALEKS's artificial intelligence engine won't let students "game the system."

Once the assessment is concluded, the student may begin a topic. ALEKS corrects and analyzes mistakes and offers specific advice for particular problems. An "Explain" button offers guidance and access to an online hyperlinked dictionary. ALEKS continually monitors and updates its map

PRODUCTS & SERVICES

of the student's knowledge. Once students demonstrate mastery of a concept, they advance to the next topic.

ALEKS offers a Teacher Module that enables teachers to plan lessons after gauging each student's achievement. The module generates summaries for individual students and for the entire class, permitting the teacher to choose topics the class is most ready to learn. ALEKS is delivered online, is accessible from anywhere at any time, and works with Windows- and Macintosh-compatible personal computers.

Although the program's graphics may lack the pizzazz of other software packages, and it is difficult to go back and review problems once a session is completed, ALEKS does provide an effective means to address student needs at all ability levels and to provide formative assessment, feedback, and problem selection tailored to each student.

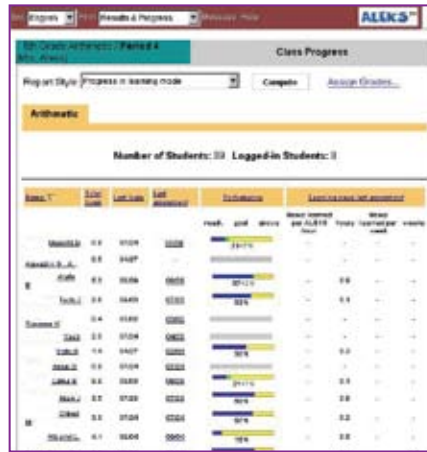
ALEKS Corporation

400 North Tustin Avenue, Suite 300
Santa Ana, CA 92705
<http://www.k12.aleks.com/>

Price: 3-month license, per student \$25; 12-month, \$35

Modules offered:

- Arithmetic
- Middle School Geometry
- Middle School Math 1



- Middle School Math 2
- Middle School Math 3
- Pre-Algebra
- Foundations of High School Math
- Algebra 1
- High School Geometry
- Algebra 2
- Math Prep for CA HS Exit Exam
- Pre-Calculus without Trigonometry
- Pre-Calculus
- Trigonometry



David L. Johnson is a doctoral student in the Learning Technologies program at the College of Education and Human Development, University of Minnesota.



Figures 2 and 3. A teacher class summary, and teacher summary for an individual student.

GIMP: GNU Image Manipulation Program

By Steve Chastain with Jay Pfaffman

One of the biggest problems with open source software is the choice of names. So when you explain that "The GIMP" is the GNU Image Manipulation Program, normal people still turn their heads and squint. When you then explain that GNU stands for "GNU's Not UNIX," people are likely to walk away shaking their heads. Fortunately, using The GIMP does not require as much explanation, and the advantages of being able to provide a powerful image



editing program to every teacher and student at home and at school is not hard to understand.

With the increasing availability of digital cameras, taking pictures and displaying photos of classroom events has become increasingly common. I learned about The GIMP in one of my co-author Jay Pfaffman's classes. I was hesitant about learning another application, but thought I would give it a try. It's a quick download from <http://www.gimp.org> and is available for all three major platforms, although the Mac OSX version requires Mac X11.

The GIMP is flexible and easy to use. After just a few moments of looking at the menus and tool bars, most people will be well on their way to editing

photos. The icons on the tool bar are sensible and The GIMP offers several adjustment options for each of the tools, giving you flexibility in how you apply the tool. For instance, you can save images in more than 30 formats.

When you first open The GIMP, a tool bar opens that allows you to start a new project, open an existing project, or acquire an image from clipboard, screenshot, or twain source (scanner or some cameras). After opening an image, a menu offers many of the same tools that are offered in Photoshop. The GIMP has tools to adjust light levels, crop images, or change the color of the sky. Those experienced with Photoshop will find the transition to The GIMP painless. Novices will

find it friendly and easy to learn. Even figuring out how to do cropping and resizing is a snap.

Teachers and students alike will find The GIMP to be a useful tool for the classroom. You will be able to create an online photo album, design eye-catching posters, and fix those photographs that didn't come out the way you intended. The large collection of filters provides you with automated means of editing photos. These special effects can change your photo to an old fashioned print or make it look like an oil painting drawn on canvas. There are even filters that can make your photo look like a cartoon, a drawing, or even something totally unique. You will also find filters that change the lighting, colors, texture, and many other image attributes. After selecting a photo, choosing the appropriate filter is straightforward. The GIMP's unlimited undo feature makes experimenting safe.

Teachers who want their students to learn to edit photos or just creatively display their own photos will find The GIMP to be very useful. The GIMP is a powerful image editing package that has something to offer everyone. It is well established. You can find many tutorials on the Web or buy one of several GIMP reference books available, some of which come complete with CD-ROM resources.



Stephen Chastain is a graduate student at The University of Tennessee, where he is studying instructional technology. He is a technology trainer with the Office of Information Technology at the university.

He believes that a combination of photography and technology will prove to be an effective tool for educators to teach and communicate with students of all ages.

Jay Pfaffman is an assistant professor of instructional technology at the University of Tennessee. When not fussing with computers, he studies ways to increase student engagement and reviews open source software for L&L.



The GIMP interface enables users to access the wide variety of image-editing available with relative ease. The use of advanced tools such as filters is intuitive and shouldn't be a problem for even novices.

Toshiba Satellite Convertible Tablet PC

By J.V. Bolkan

Toshiba has joined the flexibility and innovation of a tablet PC with the strength and power of a full-fledged laptop system to create the Satellite R15-S822.

As a laptop, the Satellite is a mid-range system. Built around Intel's 1.6 GHz Pentium M with the Centrino mobile configuration, the base system isn't cutting edge, but it is certainly more capable than most computers (desktop or laptop) currently in use in most schools.

Complementing the core system is a relatively generous 60 GB hard drive, 512 MB of RAM, integrated SRS audio, and a CD burner/DVD-ROM drive. Fairly standard fare for a mid-range laptop.

The LCD screen, at 14.1 inches, is a bit undersized when compared to other laptops in the Satellite's price range, but of course, it isn't just a typical laptop screen. In tablet mode, it is a fully functional touch screen.

With a native resolution of 1028 × 768 and 16-bit color, the image quality is good. Because the screen is coated with a tough film to handle stylus input, it is a bit more prone to reflection and glare than average laptop screens. This isn't a huge drawback though, because in slate mode, angling the screen to avoid glare couldn't be easier.

The layout of the laptop is fairly standard. A nice, easy-to-use touchpad sits under the full-size keyboard. As with most laptops, the keys are a bit mushy compared to a standard keyboard. Various ports and connectors including audio, USB, PC Card, modem, ethernet, and an SD memory card slot are arranged along all four edges. The power switch is on the monitor so that it is accessible in both tablet and laptop mode.



Toshiba's Satellite R15-S822 is a convertible tablet PC with respectable laptop muscle and an excellent pen-based interface.

Toshiba loads a fair software bundle onto the Satellite. In addition to Microsoft's latest tablet version of Windows XP, the hard drive comes with Norton AntiVirus 2005, Microsoft Works, a 60-day trial of Office 2003, and a host of useful utilities and small applications such as the Franklin-Covey TabletPlanner.

Although the laptop features and functions are solid, if not spectacular, it is the tablet capabilities that make the Satellite a special device.

Converting to tablet mode is simple: the screen swivels with little effort and snaps to the base, creating a solid tablet. Screen orientation automatically shifts to landscape mode. The stylus nests in the tablet body next to the CD/DVD drive.

Pen accuracy is excellent. I didn't even think about having to calibrate the pen and screen. Because the Satellite is larger than most tablets, it can be difficult for those with smaller hands and arms to brace the tablet and efficiently use the pen. Likewise, few but the strongest among us will be able to ignore how heavy a 4.4-pound tablet really is.



Fortunately, Toshiba has recognized that tablets are more likely than most machines to take a fall. When the Satellite detects excess vibration, the hard drive automatically parks itself. However, I was reluctant to test the efficiency of this scheme by dropping the loaner machine.

One area where you won't regret the robust computing platform behind the tablet is handwriting recognition. Despite the best efforts of my elementary teachers long ago, my penmanship is more free-form than standard. Even so, accuracy was truly amazing.

Competitively priced and more powerful than most tablet PCs, the Satellite is much more flexible than a standard laptop. Younger students may find it too heavy and bulky, but middle school and high school students will certainly benefit from the performance.

Toshiba recently updated the tablet to the R15-S829, which now includes a combo DVD burner and an 80 GB hard drive. List price remains at \$1,499.

Toshiba

<http://www.toshiba.com>



J.V. Bolkan is a senior editor for L&L with a penchant for gadgets.