SMARTBoard Users Manual
Isles District Schools

December 2005

Table of Contents

SET Up Information

Setting up a SMARTBoard varies a bit depending upon your school's operating environment. It can even be set up wirelessly. The most typical method is described below:

Set-Up Instructions—Board to Computer

- With the computer off, connect the SMARTBoard cable. The USB end goes into the computer. The other end of the cable will be attached to the SMARTBoard (look on the underside of the screen, right-hand corner).

Set-Up Instructions—Projector to Computer

- Next connect the projector. Connect the power cord to the projector and plug into an outlet. Connect the computer cable. This runs between the computer's monitor slot and the projector.

Powering Up

- Turn on the projector.
- Then turn on the computer. The computer should find the projection device.
- Re-position the projector until the computer image fills the screen, without spilling over.

Orienting the Board

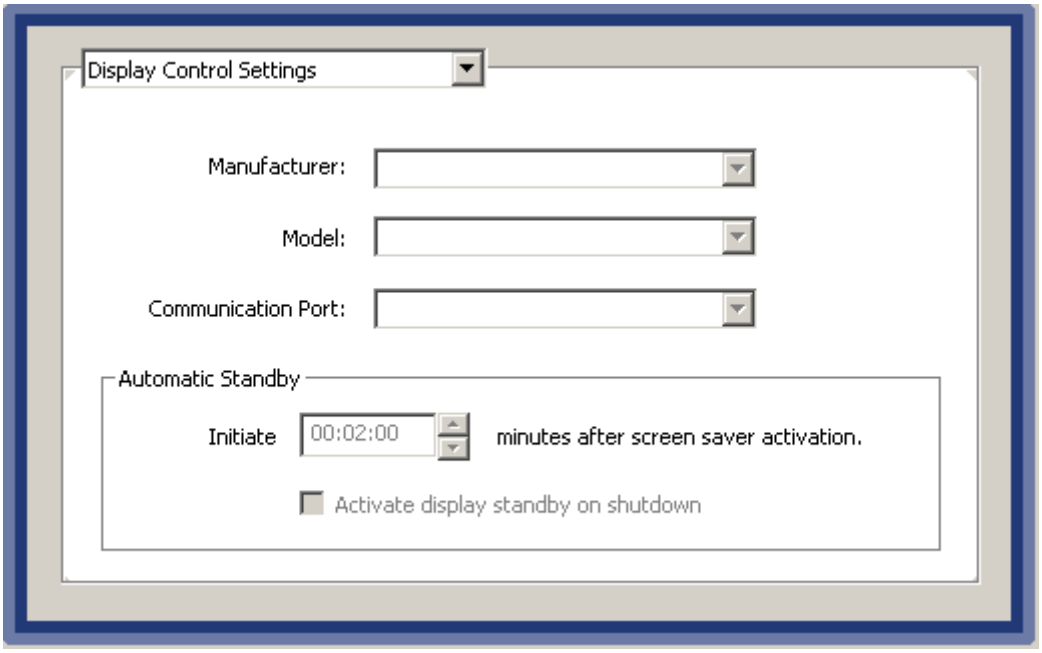
There are a couple of ways of orienting the board.

- At the SMARTBoard itself, press both of the small buttons in the pen tray at the same time. The "orienting" screen will come up. Push on the center of each of the orientation points, typically nine. The closer you can get to the center the better the orientation.

- From your computer, right-click on the software (bottom left) and choose orient, or from the Start Menu, choose SMARTBoard software/Control Panel/Orient. Then walk up to the board and complete the same steps as above.

Other Installation Items

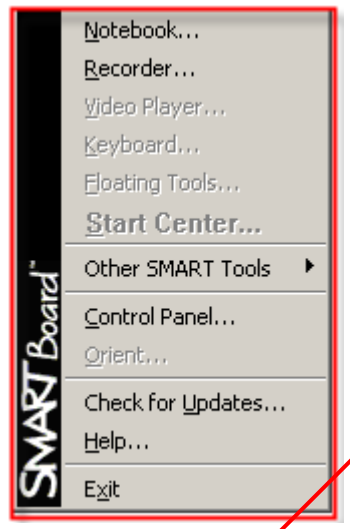
- The native resolution of the Optoma projector is 1024 x 768. According to SmartTech, your projection image will be best with your computer set the same way. Currently, a PDF version of the Optoma manual is available at http://www.optoma.co.uk/optomav2/modules/EP739/UMAN_EP739_ENG.pdf For other projectors, check the manual for native resolution.
- On a laptop, you can usually see both the laptop and the SMARTBoard displays. You may have to toggle in order to do that. Usually the Function Key with a specific number key handles that task. With a desktop model, sometimes you can have both displays, depending upon the kind of connection. If you can see only the SMARTBoard, that is rarely a problem. The image should be clear enough for you to work from the SMARTBoard.
- Install the latest version of Notebook software, regardless of the version you receive with your SMARTBoard. The current version is 9.1.4. To find the most up-to-date version, check the SmartTech website. http://www.smarttech.com/support/software/index.asp The latest version of the software includes many desirable features, as well as more items for the Notebook gallery.
- The latest software manual is located at: http://www.smarttech.com/support/product/sb6/guides9.asp
- For lots of tips on using the SMARTBoard educationally, visit the companion website for this product, EdCompass, at http://edcompass.smarttech.com/ec/en-us/
- If your SMARTBoard will need to move frequently in order to be used by many teachers, it will be easier if the SMARTBoard software is on all computers. This can be done without installing it machine-by-machine. If you click "Help," from the SMARTBoard tray icon, you'll be able to access a great deal of information which is actually stored on the "C" drive of the computer, as part of the software installation process. Choose to view the help material by "Contents," then choose "Installing, Updating, and Removing Software." Alternatively, you can save the setup program onto your teacher common drive and people can install their own software. As people become aware of Notebook software, they will actually see that having the software is useful even when the computer is not connected to a SMARTBoard.
- You may be able to save the life of your projector's bulb by using the SMART Bulb Saver as your screen saver. Currently, the Optoma is not on the list of supported projectors. SmartTech periodically adds new supported models, however, so we hope it will show up eventually. If you have other projectors in the building, you might compare them to the list that is supported. To find the supported list, right-click on the desktop to bring up Properties/Screen Saver. Then click the "Settings" button. Then click "Display Control Panel." You'll get a dialog box like this one:

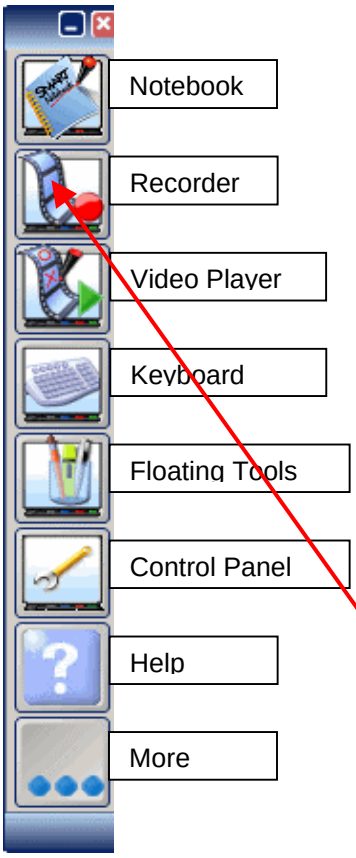


You have to be connected to the SMARTBoard in order to do this. If you are, you will see a list of manufacturer names to choose from. If your model is there, you can then configure the SMARTBoard to shut down. This is in theory. My own projector is not on the list, so I have not been able to demonstrate that this will definitely occur.

SMARTBoard Software

Your SMARTBoard operates as a result of SMARTBoard software. This consists of several different items, as shown below. If you are not actually attached to a SMARTBoard, certain portions of the software will be grayed out. The fact that portions of it are not is a very good feature. It means that you can create portions of your lessons without having a SMARTBoard available at the time. This is particularly true because the Notebook is one of the active items. See the information on the next page for more detail.





Control Panel: Here you make many different choices. For example, you determine to orient your SMARTBoard with 4, 9, or 20 points, depending upon the accuracy needed. You can also decide the thickness of your writing, the size of the eraser, etc. It is worthwhile to browse through these settings to learn about the possibilities.

Other SMART Tools: These include the screen shade, which hides what is on the SMARTBoard, the spotlight, which allows you to focus on a section of the board while the remaining part is not seen, a magnifier, and calculator.

Floating Tools: With these open, you can capture a screen, print a screen, insert writing into a document, and a variety of other things. You can also customize your floating tools to add additional ones or make them more or less transparent. You can also establish right-clicking with the floating tools. Another way to right-click is to use the bottom button in the pen tray. After depressing it, the next time you touch the board, you get right-click menus.

Keyboard: This brings up a keyboard on the SMARTBoard. You can type on it; for small amounts of text, it is okay. The top button in the pen tray also brings up the keyboard.

Video Player: You can use the SMARTBoard player for videos. Of course, you can also display movies in Real Player, Windows Media Player, etc. In the SMARTBoard video player, however, you can write on the screen if you want to annotate responses, for example, during a student discussion.

Recorder: If you click the "Recorder" at any point during a SMARTBoard session, if you have a microphone on the SMARTBoard computer, you can record everything on the screen and accompanying voice explanations. It is very easy to use. Push a button to start and push a different one to stop.

Notebook: The notebook is a very valuable part of this collection of software. Entire lessons can be taught making use of it alone. See a more complete description of this feature in "SMART Notebook Software."

Start Center: The "Start Center" can be customized to add additional tools and/or make it more or less transparent. If you allow it to open when you are attached to a SMARTBoard, you can access just about all the features available from other menus. Each item described above is also in the "Start Center."

Most of the other items are fairly self-explanatory.

Ink-Aware Applications

Word, Excel, PowerPoint, and Paint are among the applications that are considered to be "Ink Aware." That means that you can work in these applications as you do in the Notebook. You can write and convert the writing to text, and/or capture portions of a document and bring it into the SMART Notebook. You can capture with the capture tool.

It looks like this: 

An even easier way to capture material (from the Internet or other sources) is to print to the Smart Notebook Print Capture. To do this, you need to have the Notebook software open. If you don't see the SMART Notebook as a print choice, re-install the software.

Tip: To save a webpage to share with students, increase the font size on the webpage first and then print to the Smart Notebook. You can then share the page, as it was, with the students, in slightly larger print. It will have copied as a locked object so that it cannot accidentally be removed. If you wish, you click in the upper right-hand corner and unlock it. Once the webpage is in the Smart Notebook, you can write on the page and edit it as you wish.

SMART Notebook Software

The current version of this software is 9.1.4. The SMART Notebook opens with three tabs.

The **Sorter** contains all the documents that will make up a presentation (for example, the day's lesson). To illustrate, the first page in the sorter might be your plan of the day, the second page of the sorter could contain the day's Daily Oral Language activity; page three could direct students to the main lesson for the day. It might even contain a copy of the work from the book. Anything that is a file can be projected on the SMARTBoard, so if the pages to be worked on for the day are scanned, they become files that can be opened on the SMARTBoard. Furthermore, both students and teacher can write on those pages and save the resulting work for absent students, or as a guide for future assignments.

Tab two is the **Gallery**. This tab contains clipart, templates, and numerous activities that can be used for teaching just by dragging them out into the main Notebook area. In the gallery, you will notice three kinds of objects. The first two are illustrated below.

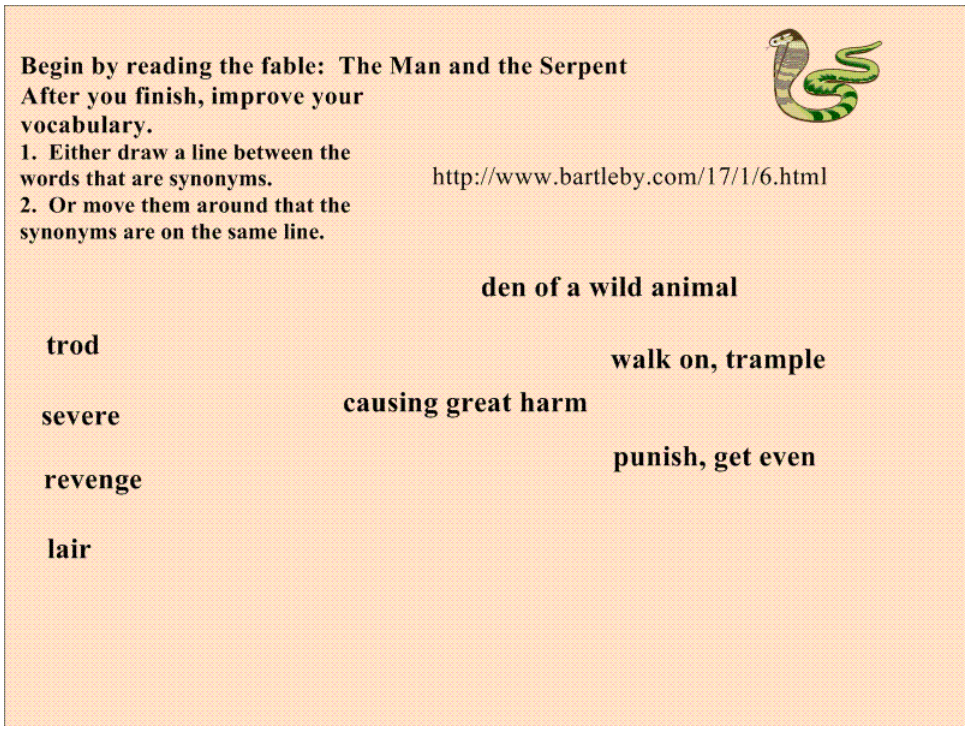
 Template	The objects with frames around them are templates, which will fill the notebook space. Thus, the piggy bank at left, if dragged out into the Notebook space, will fully occupy the screen. Students can then put coins into the piggy bank.	 Plain graphic

In addition to templates and graphics, you will find that some topics also include "Flash" objects as well, which, like the other two, can be dragged into the main area of the Notebook screen.

The final tab, **Attachments**, allows the user to create links to documents, websites, and other resources that are to be used during the lesson. When you double-click on the links created in Attachments, the items are brought into use. When you click back, you return to the Notebook Software.

Good Language Arts Ideas

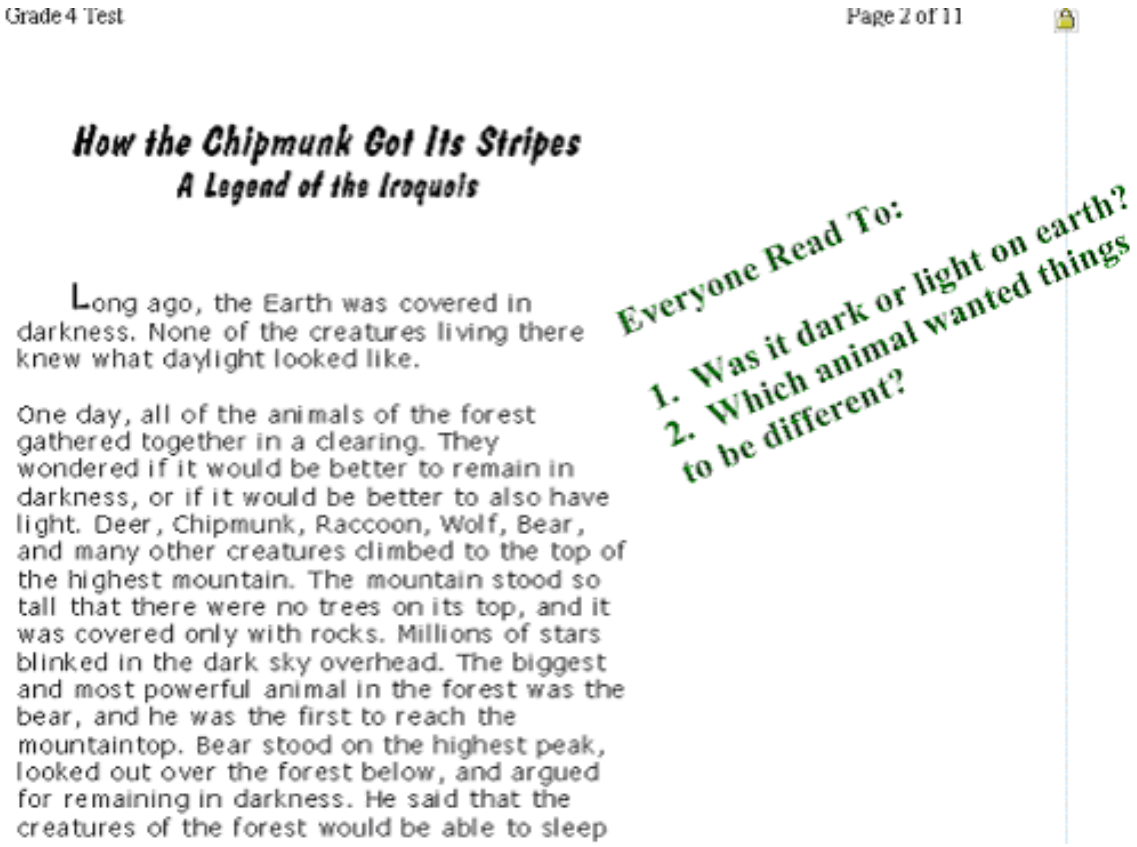
"**Click and Drag" Activities**. Depending upon content, these activities are suitable at any grade level. These can easily be created using just Notebook software. The key is to make each item in the activity its own object. An object is created anytime you hit the enter key. The sample below is an image of a Notebook file. If you have Notebook software on your computer, click here to open the file. Each word and definition is a separate object. In addition, the picture, the web site, and directions are also separate.



"Click and drag" activities can also be created using Kidspiration, Inspiration 7.6, and SMART Ideas. All schools have some licenses for Kidspiration and/or Inspiration. SMART Ideas might be available on your SMARTBoard computer.

Reading Comprehension Activities

Below is an image of a webpage drawn into Notebook software and annotated. Again, suitable webpages can be found for all grade levels and across a variety of content areas. Handwritten annotations are equally acceptable as far as the software is concerned, so the teacher can write "on the fly." If you have notebook software, you can open the entire file (11 pages).
Web Source: http://www.longman.com/ae/marketing/sfesl/tests/grade4.html



Speller Software: A free download from SmartTech. This software works only when you are connected to a SMARTBoard. This application is most suitable for the elementary grades; however, it might be of value in special education classrooms or middle grades language arts.

http://edcompass.smarttech.com/ec/en-US/Learning+Resources/Software+Resources/Free+Educational+Software/Speller.htm

Good Websites

Read-Write-Think:

http://www.readwritethink.org/lessons/index.asp?grade=0&strand=0&engagement=0

This is a site, co-sponsored by the International Reading Association, the National Council of Teachers of English, and MarcoPolo, an education portal. You can search for lessons based upon grade level. Appropriate ones across grade levels are available. There are a large number of activities from which to choose.

Research and Writing: http://www.ipl.org/div/aplus/

This is a step-by-step approach to researching and writing a paper, suitable for secondary students. This is a very comprehensive site, and it would provide a solid basis for guiding students through what is a very difficult product to create. Essentially, the web site can be shared, discussed, and annotated to make the assignment of creating a paper much easier.

Aesop's Fables Online. http://www.aesopfables.com/

This is an extensive collection of fables, some of which are accompanied by audio narration. They can be useful for comparison/contrast activities, vocabulary enhancement, and reading comprehension. Re-telling the stories with a modern twist is a useful application, which requires some higher-level skills in order to accomplish. Because of vocabulary, the stories are probably too difficult for lower grades.

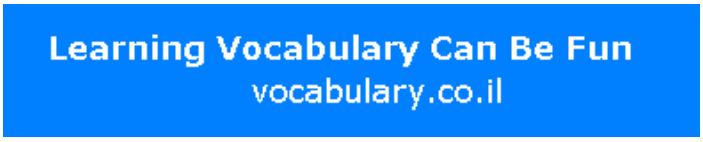
Daily Grammar: http://www.dailygrammar.com/archive.shtml

This is a collection of grammar exercises. For use on the SMARTBoard, the type probably needs to be enlarged, but these would make quick starter activities.

Grammar Bytes: http://www.chompchomp.com/menu.htm

This site is interactive. It is more fun than the "Daily Grammar" site, but there are not quite so many activities.

Learning Vocabulary Can Be Fun: http://www.vocabulary.co.il/



Vocabulary is presented here in the form of crossword puzzles, matching games, and quizzes. The activities are available in varying difficulty levels. This is another activity that is suitable for short-term use.

The English Zone: http://english-zone.com/index.php

This is actually a website intended for the study of English as a second language; however, it features activities of interest for first language instruction too.

Good Math Ideas

Notebook Templates.

Start by checking the Notebook templates by topic area in Math. Here is a brief listing of the items you can find:

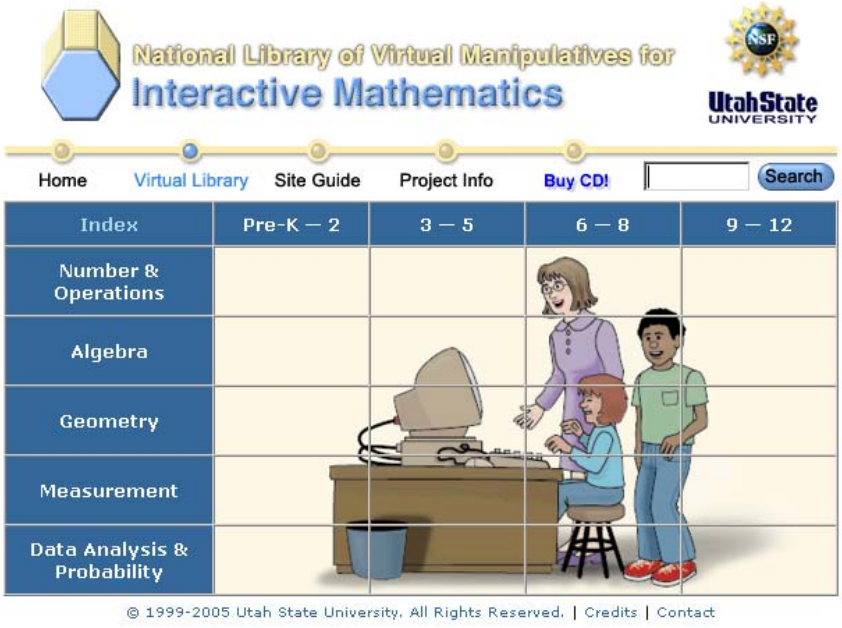
- Currency templates: a piggy bank or bank teller plus coins (early grades)
- Number Lines: Positive and negative integers
- Fraction pieces
- Graphing Paper Templates
- Algebra Tiles
- Tessellations
- Dice for Probability study

Cruncher

Number Cruncher Software: A free download from SMARTTech. Like Speller, this works only when the user is connected to a SMARTBoard. It also most suitable for elementary grades; however, it is useful for a review of basic computation skills in middle grades or special education classrooms. http://www.edcompass.com/ec/en-US/Learning+Resources/Software+Resources/Free+Educational+Software/Number+Cruncher.htm

Interactive Math Websites

National Library of Virtual Manipulatives: http://nlvm.usu.edu/en/nav/vlibrary.html



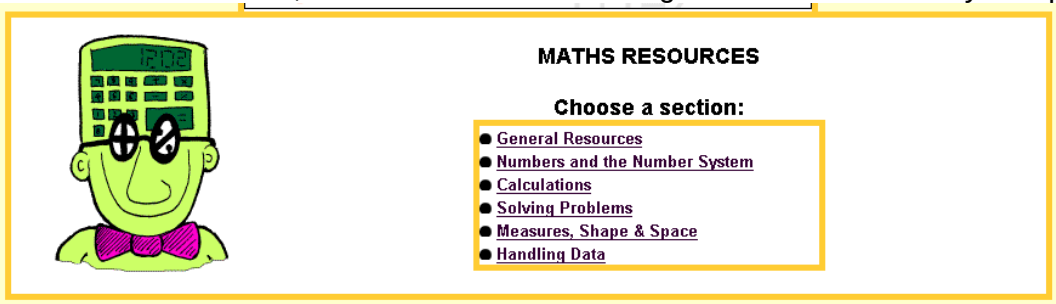
As you can see from the image above, the site is organized according to NCTM standards and grade levels. Some of these activities will require keyboard/math intervention. Some will respond to direct SMARTBoard manipulation. This is almost a "must-see" site. There are numerous java-based applications at the site; these are highly interactive within a SMARTBoard environment.

NCTM/Marco Polo Illuminations: http://illuminations.nctm.org/

This is an excellent source for standards-based mathematics lessons, many of which make very good use of the interactive nature of the SMARTBoard. Be sure to check both "tools" and "lessons" for great teaching materials. This site, like the one above, is also is a "must-see" one. It is well organized, and it is easy to locate grade-appropriate tasks and activities.

Maths: http://www.primaryresources.co.uk/maths/maths.htm

This is a UK-based site, which contains activities organized around a variety of topics:



Project Interactivate: http://www.shodor.org/interactivate/

This site also contains a huge number of interactive, online activities. Lessons are also available for grades 6-8. They are focused on the NCTM standards. There is a special elementary section for grades 3-5. http://www.shodor.org/interactivate/elementary/index.html

Create a Graph: http://nces.ed.gov/nceskids/createagraph/

At this site, students can create graphs, following a series of simple steps. Polling the class and creating a graph is very easy to do, and everyone can see and participate in its creation.

Math Stories: http://www.mathstories.com/

This is a good site for word problem practice.

Cool Math: http://www.coolmath.com/

This site has flash cards, games, and other interactive activities as well. It covers a good range of ages, and it is motivational.

Good Social Studies Ideas

Notebook Ideas

The Notebook software contains at least two sets of images that are useful in social studies. There is a geography section, which includes many maps. In addition, these can be completed as "click and drag" as the individual countries can be placed into their correct locations on larger maps. There is also a history section that contains templates and images associated with major content themes: the Romans, the Greeks, Columbus, World War I and II, etc.

Websites

Xpeditions: http://www.nationalgeographic.com/xpeditions/

NATIONAL GEOGRAPHIC marcopolo
XPEDITIONS
GEOGRAPHY STANDARDS IN YOUR CLASSROOM

You'll find the national geography standards here and a series of lessons designed to help you achieve them. The site also includes maps and other activities.

Free Maps and Lessons: http://www.nystromnet.com/index.cfm?fa=Maps.main

November 2005
Maps of the Month

Southeastern Asia : HTML or PDF

This month we are focusing on the countries of Southeastern Asia. This reference map of **Southeastern Asia** can be used as a classroom resource for lessons in:

- History
- Geography
- Government
- Current Events

Students can also download and print the map and include it in presentations or reports.

U.S. A. Online Maps: http://www.sheppardsoftware.com/web_games.htm

U.S.A. Online Map Puzzle Games

Learn states, lakes, rivers, and other geographic features here. The site contains learning activities as well as quizzes to test learning. Both are motivational used on an interactive whiteboard.

Geography Quizzes: http://www.ilike2learn.com/ilike2learn/

Ilike2learn.com

This site helps students learn countries and capitals of the world.

Cyber School Bus: http://www.un.org/Pubs/CyberSchoolBus/index.asp

This site is hosted by the United Nations and contains excellent resources for approaching many important social studies topics.

Fact Monster: http://www.factmonster.com/

FACT MONSTER™

This is a great online almanac for students, produced by Information Please. It has a great deal of information on people, places, holidays, and more.

Good Science Ideas

Notebook Ideas

The Notebook software for Science is broken down into many topics: Animals, Astronomy, Chemistry, Physics, etc. Each section contains templates, graphics, and in some cases Flash objects. The Chemistry section, for example, contains a template of the Periodic Table (filled in or blank), molecules of various sorts, chemical elements, etc.

Websites

Science NetLinks: http://www.sciencenetlinks.com/

Here is a rich source of lesson plans and other items to support science teachers in their planning and for instructional use as well. The Tool Index (http://www.sciencenetlinks.com/tool_index.cfm) is a magnificent source of additional websites, classified by grade level and the national science benchmarks (also located on the site). This is a wonderful location for lesson plans.

WebElements: http://www.webelements.com/

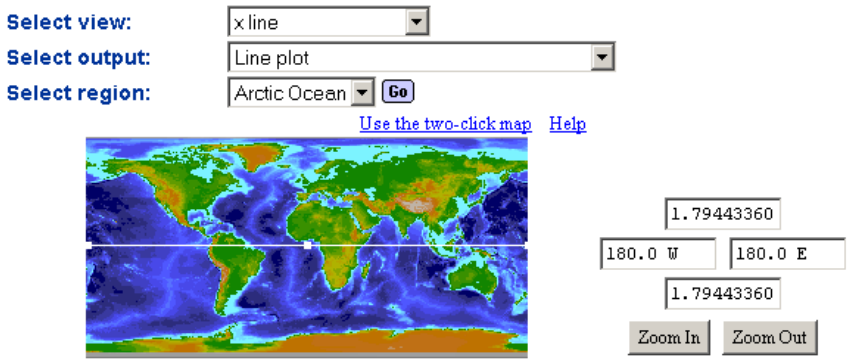
This is an online, interactive Periodic Table. Each element can individually clicked on, in order to acquire information about it. The site has sound as well so that the element description can be heard, rather than read.

How Stuff Works: http://www.howstuffworks.com/

This is a large site, full of information on a huge variety of topics. It is also presented in a very engaging manner.

Exploratorium: Ten Cool Sites. http://www.exploratorium.edu/learning_studio/sciencesites.html

This is a huge site, which contains 10 sites each for major content areas such as physics, chemistry, astronomy, and weather, among others. For example, in the weather section, live data is available on climate factors, such as precipitation and temperature. See sample image below.



Annenberg CPB Learner.org: http://www.learner.org/teacherslab/

This site is suitable for middle school and high school. It covers various topics in some depth. Current features (November 2005) include "The Science of Light" and "Patterns in Mathematics."

Greatest Engineering Achievements of the Twentieth Century: http://www.greatachievements.org/

This site contains fairly in-depth information on some major technological innovations.

Other Subject Ideas

- Building Smarter Ways to use the SMARTBoard.
  http://www.kenton.k12.ky.us/SmartBoard/smarthumanities.htm At this site, you'll find music staff papers and art templates.
- Creating Music
  http://www.creatingmusic.com/
  Finale Music Program: A free download from SMARTTech
  http://www.edcompass.com/ec/en-US/Learning+Resources/Software+Resources/Free+Educational+Software/Finale+Notepad+2005.htm
- Target Heart Rate Resources
  http://pe1.org/tools.htm
- Paint Program: The Paint program is marvelous within the environment of the interactive whiteboard. All the colors in paint are available, regardless of the color of the ink pen you pick up, and/or you can "finger paint" as well. Either way, fine-motor control beats the use of a mouse.

Free Support

SMARTTech has a companion website that is focused upon the use of interactive whiteboards in an educational environment. Here are some of the items you can locate there:

- Already made, standards-based lessons for a variety of grade levels.
  http://education.smarttech.com/ste/en-US/Ed+Resource/Lesson+Activities/Notebook+Activities/default.htm

- Educators' Resources: http://education.smarttech.com/ste/en-US/Ed+Resource/PD/default.htm

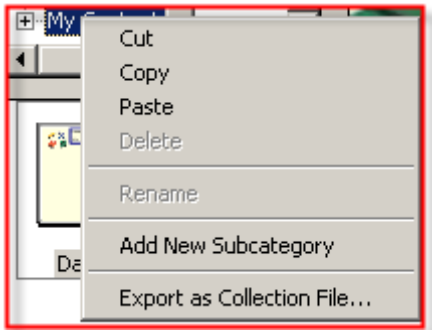
Making Your Own Content

You can make your own content for the SMARTBoard quite easily. The easiest thing is simply to open the Notebook Software and begin preparing what you want to be on the document, just as if you were making a WORD document.

- To add pages: Insert/Blank page.
- Your pages can contain any pictures currently in the gallery, or you can locate your own pictures from the web and copy and paste them into your page. You don't have to save the picture; copying is sufficient. Also, you can insert pictures by browsing to a known location as well. If the image you copy or insert is an animated one, it will show up on the Notebook as an animated image.
- If you want to be able to move items that you create later (for a "click and drag" activity), remember to hit the "enter" key after each word or group of words that should go together.
- When you finish creating the lesson, save it and know where you put it, so that you can open the created lesson.
- Because you can open the lesson in the Notebook, you can create the lesson anywhere, without having to be on a computer attached to a SMARTBoard.

Alternatively, if you wish, you can add images and templates to the gallery. This may be especially useful if you expect to use something often. For example, you might want to create a template for your Plan of the Day, for a brief starter activity, your Journal Writing topic, etc. (If you have SMARTBoard software, see template.)

If you want to create a group of images that all fit together, you can follow these steps:



1. Begin by collecting the images you want in one folder.
2. Then, in the gallery, right-click on "My content." You should get the following choices. Choose "Add New Subcategory." Name the category created.
3. Then click on the name of the category and go up to the Add/Import button at the top of the page. Then add all the pictures you collected in the first step.

These pictures will be permanently in your gallery and available for use at any time.

Acknowledgements

Information for this manual was derived from the following sources:

"User's Guide." Smart Technologies. Dec 2004. Smart Tech. 05 Dec. 2005 <http://downloads.smarttech.com/media/products/sb/userguides/pdf/english/sb_winuguide.pdf>.

"Software Resources." EdCompass. Smart Technologies. 05 Dec. 2005 <http://www.edcompass.smarttech.com/ec/en-us/>.

"Optoma EP739H." Optoma. 05 Dec. 2005 <http://www.optoma.co.uk/optomav2/modules/EP739/UMAN_EP739_ENG.pdf>.

Images from websites come from each respective site.