

NETFILES

Teacher's Guide
To Accompany
The Video Series

Produced by WHRO Public Television
Norfolk, Virginia

Teacher's Guide developed by
Barbara Linde
with
Meghan Lunsford

NETFILES

Be on top of Internet integration - Use Net Files.

This monthly in-service television program shows you the tools, sites, and equipment you need to be Netwise and takes you to Net Classrooms where your fellow teachers seamlessly integrate the Internet into their lesson plans and student activities.

Each month prepares you for instruction to use in your classroom in the following month. Segments also appear on the series' Web site with additional lesson plans and information.

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Netfiles Program #101 Language Arts

Topics

- Basic ground rules for using the Internet
- Setting up an e-mail account
- Using the Internet to explore the community
- Preparing for a hurricane

Netspeak Terms

- **ISP** Internet Service Provider. A company which provides other companies or individuals with access to, or presence on, the Internet.
- **listserv** One of the earliest types of e-mail discussion lists, and still in widespread use, although there are many other types now, too. The most common kind of mail list, Listservs originated in BITNET but are now common on the Internet. They are an automatic mailing service, which processes electronic mail requests for subscribing to or deletion from mailing lists. Listservs are forums that focus on specific topics. All are accessed via e-mail.
- **browser** Software that will load and display a webpage. The principal browsers are Netscape, Microsoft Internet Explorer, Opera, Mosaic, and the text-only Lynx.
Application software that gives you a graphical interactive interface for searching, finding, viewing, and managing information over a network.

Netwise Summary

The Internet is a variety of tools, and E-mail is the most popular one. You can get an account with an ISP, or internet service provider. The E-mail address consists of the user's name, an ampersand @, and the computer where the account sits. Most ISPs will set up the browser to send and receive mail. It's also possible to do this from your own computer.

Web-based E-mail servers like hotmail are popular because they make it possible to check E-mail from any computer that has Internet access.

The listserv has many mailing lists for teachers. A penpal group called epals has 6600 classrooms all over the world looking for keypals. Two sites mentioned are:

<http://www.epals.com>

<http://mightymedia.com/keypals>

Net News

The Apple i-Mac is selling well, although there is some controversy about Apple not including a floppy disk drive. Apple co-founder Steve Wozniak is now teaching computer classes to middle school students in Los Gatos, California. Windows 98 sold 510,000 copies in the first four days it was released.

Netfiles Program #101 Language Arts

Net Classroom

Summary of Classroom Lesson 1

Pam Lewis teaches 5th grade at Norge Elementary School, Williamsburg/ James City County School District. The “Exploring Our Community” lesson she developed gave students the opportunity to learn more about their community and share their research with another community via E-mail. Students formed small interest groups and researched the history, climate, geography, economy, transportation, and entertainment of their community. They took field trips and learned to use a search engine to find information using the Internet. During the research phase, students communicated via E-mail with their research partners in the other community. Students used a word processing program to compose their reports, then placed the reports on the class Webpage.

Virginia Computer/Technology SOLs: C/T5.3; C/T 5.4, C/T8.2, C/T8.4

Summary of Classroom Lesson 2

Debra Rollins, Kemps Landing Magnet School, Virginia Beach Public Schools, worked with a group of students at Plaza Middle School and a 5th grade class in California .The project was sponsored by the American Red Cross, Cox Communications, and the Weather Channel, with the curriculum provided by the Weather Channel. Students studied the weather for a month and prepared for a hurricane. They sent video and information to the school in California. A meteorologist in Atlanta worked online with students, instructing them on weather and sending weather maps. Each student in Virginia Beach had a keypal from the class in California. Ms. Rollins and her students were the first in Virginia Beach Schools to use video conferencing. She and the students worked through the troubleshooting process. Programs such as Netmeeting and CU-See Me are used for videoconferencing.

Virginia Computer/Technology SOL: C/T5.3; C/T 5.4, C/T8.2, C/T8.4

Summary of Classroom Lesson 3

Susan Killingsworth, Princess Anne High School, Virginia Beach Public Schools, used the Maya Quest program. Students read the E-Mails from the explorers and tracked their progress on maps. Students apply their keyboarding class skills while doing interesting activities.

Virginia Computer/Technology SOL: C/T 5.2, C/T5.3; C/T 5.4, C/T8.2, C/T8.4

Net Safety

Most schools have students sign an AUP, or Acceptable Use Policy. Students are made aware of school regulations regarding using the Internet. They are cautioned not to use last names, or send addresses or pictures. The National Center for Missing and Exploited Children has brochures available on line. The address is: <http://www.missingkids.com>.

Netfiles Program #101 Language Arts

Extension Ideas

- Have students develop a brochure on Web safety. They can post it online and make paper copies to distribute to other classes.
- Have students keep a journal for a month, describing the weather and telling how it affects them.
- Have students read a survival story, write a short critique, and post it on the class Website.
- Have students write a survival story that includes the type of weather phenomenon they studied.
- Have students develop an ad campaign to attract tourists to their area. Post the ads on the class Webpage.

Netfiles Program # 102 Social Sciences Elections

Topics

- Using search engines
- Acceptable Use Policies
- Using the internet to research the political process

Netspeak Terms

- **search engine** An internet tool that helps the user find specific information on the internet. Information is found by typing a search query or string.
- **search directory** An internet tool that organizes information in broad categories a la the yellow pages.
- **meta engine** A search engine that searches multiple search engines at one time.
- **portal** An "entry" to the internet that provides the user a way to access specific information via a consistent, organized interface.
- **Boolean operators and descriptors** A method of refining a search query by combining or excluding terms through the use of *plus* or *minus*, *and*, or *not*.

Net News

A recent report from the Educational Testing Service in Princeton, New Jersey, found that technology in the classroom works when the teachers get the proper technology training. The study did not describe the type or amount of teacher-training that would be effective.

Congress cut the funding for the E-rate program, which subsidizes the cost of internet access for students.

Schools are in disagreement about whether or not to allow students to read the Starr report. While the report has historical significance, the contents would not be acceptable according to many school acceptable use policies.

Netwise Summary

The internet is a valuable source for researching elections and the political process. Good sites to visit include: **Web White & Blue at**

<http://www.webwhiteblue.org>; Washington Post Election Central at <http://congress.nw.dc.us/wpost/election.html>; and Thomas, which is the U.S. Congress on the internet at <http://thomas.loc.gov/home/thomas2.html>.

Search tools or search engines are popular tools for navigating the internet in the least amount of time possible. YAHOO!, a search directory, provides broad categories for you to search. YAHOO!IGANS! is the kids version of YAHOO! At www.localyahoo.com, you can enter a zipcode to find out what's hot in that particular area. Alta Vista is a popular search engine with which you can use Boolean operators to narrow your search. Metaengines, such as DOGPILE, allow you to search all engines at one time. ASK
Netfiles Program # 102 Social Sciences

JEEVES!, which also does a meta search of all search engines, lets you type in a question and then retrieves the information for the answer.

Net Classroom

Presidential Campaign Simulation

David Woody, an eighth grade social studies teacher from Kemps Landing Magnet School in Virginia Beach, Virginia, along with Debra Rollings, used the internet to have their students research the election process. Students had to come up with a platform on how their candidate stood on various national policy issues and their candidate's proposals if elected. Mr. Woody's goals were to have his students learn how to identify issues, to learn to detect bias, and to learn to detect objectivity. Students had to be familiar with the internet in order to learn about the election process. Mr. Woody's lesson plan, Presidential Campaign Simulation: Defining Issues, can be found at <http://www.netfiles.org>. Cathy Rollins showed the students how to use Netscape to read policies/issues from the city of Virginia Beach. Students enjoyed using the technology to learn more about social studies issues. Virginia Computer/Technology SOLs: C/T8.2, C/T8.4

Net Safety

Acceptable Use Policies are contracts between the user and the school system saying that the user will not enter into inappropriate searches or sites. In order to be able to share in the wealth or resources on the internet, users must be responsible or suffer the ramifications that come with abusing the policies.

Additional Terms

- **query** A request for information from a database.

Extension Ideas

- Have students create a Web page for their candidate complete with party emblem (clip art or scanned image) and a list of the issues they will be concentrating on.
- During the real elections, have students check sites daily to see how the candidates are faring in the polls. They should keep a journal of their findings and make predictions about who will win the election.
- Have students search one of the election sites and make a short report to the class about the contents of the site.

Acceptable Use Policy

The following are usually not permitted according to Acceptable Use Policies:

- Distributing home addresses or telephone numbers
- Using obscene language or displaying offensive pictures
- Violating copyright laws
- Accessing another student's or teacher's folder or files
- Using the network for other than school business
- Using chat and user groups for non-school activities

Netfiles Program #103 Multicultural Holiday Celebrations

Topics

- Evaluate websites technically and for content
- Filtering software
- Holidays and why we celebrate them

Netspeak Terms

- **filtering software** Software that is supposed to block or filter inappropriate content from the internet viewer.
- **spam** Unsolicited junk or e-mail.
- **cookie** Information that slips on your hard drive that tracks what you have done on a particular website.
- **Java** A programming language used to create applets (mini applications) that create various functions.

Netwise Summary

When evaluating websites, we need to look at both the technical aspect and the content aspect. Richard Waller's 60 Ticks for a Good Website can help in determining how technically good a website is. his can be found at: <http://www.waller.co.uk/eval.html>.

When evaluating a website for content, five main areas need to be looked at. These five areas are accuracy, authority, domain of the site, objectivity, and coverage of web documents and Java applications. A good resource for this aspect of website evaluation is: Kathy Schrock's Internet Resource for Educators at <http://www.capecod.com/achrockguide/eval.htm>

Net Classroom

Net Classroom visited several classes where students were using the Internet to research holiday celebrations of different cultures.

At Nansemond Suffolk Academy, Judy Barney wanted her students to learn about different holidays and how they are celebrated. Her students used the Internet to research famous, deceased native-Spanish speakers. With the information they found, students wrote reports that included where their person was born and lived, and why they were famous or infamous.

Virginia Computer/Technology SOL: C/T5.3; C/T8.2

Ann Hollowell of West Point High School had her students recreate the Mexican celebration of the Day of the Dead (el dia de los muertos) using information they found on the Internet. Her students were divided into groups and each group had a different aspect of the celebration on which to concentrate. Day of the Dead websites used were:

www.usc.edu/isd/locations/international/boeckmann/Dead/index/html

www.mexconnect.com.mex_/daydeadindex.html

Netfiles Program # 3 Multicultural Holiday Celebrations

www.azcentral.com/ent/dead/

www.daphne.palomar.edu/muentos.muertoslinks.htm

www.daphne.palomar.edu/library/DayDead.htm

Virginia Computer/Technology SOL: C/T5.3; C/T8.2

Alene Kaufman's class at Hebrew Academy of Tidewater used the Internet to research the history behind Chanukah. Her students used Internet search tools to complete a Chanukah Internet scavenger hunt. Websites used were:

www.aish.edu/calendar/songs.html

www.zigzagworld.com/hh/

Virginia Computer/Technology SOL: C/T5.3; C/T8.2

Lafayette-Winona Middle School, Norfolk Public Schools, teacher Shelly Parks had her students use the Internet to find out about the foods French Catholics have each Christmas Eve after midnight Mass. The website used by Ms. Parks' students was:

www.chin.gc.ca/Christmas

Virginia Computer/Technology SOL: C/T5.3; C/T8.2

At William H. Ruffner Middle School, Norfolk Public Schools, teacher Angela Goodloe had students use the following Internet sites to learn about the purpose of Kwanzaa.

www.officialkwanzaawebsite.org

www.freenet.buffalo.edu/community/holidays/xmas/Kwanzaa.html

www.melanet.com/Kwanzaa

Virginia Computer/Technology SOL: C/T5.3; C/T8.2

Net Safety

Filtering software is software used to block access to sites that are not child/student friendly. Popular filtering software packages include SURF WATCH, Cyber Patrol, and Net Nanny.

Additional Terms

- **bookmark** To mark a document or a specific place in a document for

later retrieval. Nearly all Web browsers support a bookmarking feature that lets you save the address (URL) of a Web page so that you can easily re-visit the page at a later time.

- **download** To move a file from a remote computer to your computer.
- **links** In hypertext systems, such as the World Wide Web, a link is a reference to another document. Such links are sometimes called "hotlinks" because they take you to another document when you click on them.

Netfiles Program # 3 Multicultural Holiday Celebrations

Extension Ideas

- Keep the identity of the Native-Spanish speakers a secret. Compile a list of clues about the person to help another student search the Web and try to uncover the mystery person's identity.
- Have students create an Internet scavenger hunt using the many websites for the Day of the Dead celebration.
- Encourage students to access Websites in the foreign languages they are studying and use that information for their research.
- Have students create a classroom Kwanzaa web page.
- Show students how to bookmark favorite sites.
- As students conduct online research, have them keep a detailed log of the procedures, including the sites they found and the steps they used to find the sites. Then compile the logs into a guide book for the class.

Netfiles Program #104 Language Arts Reading Month

Topics

- E-mail tricks with browsers
- Citing Internet sources in research
- Introduction to chat rooms
- Using the Internet to improve writing skills

Netspeak Terms

- **portal** An "entry" to the Internet that provides the user a way to access specific information via a consistent, organized interface.
- **upload** To move a file from your computer to a remote computer.
- **download** To move a file from a remote computer to your computer.

Netwise Summary

Portals are sites that allow entry to the Internet. YAHOO offers e-mail as well as a personal calendar. This can be found at: www.yahoo.com.

Excite is another portal which is found at: www.excite.com. Netscape offers e-mail through a browser. This features address books, inserting pictures directly into e-mail letters, and mailing lists. Some new browsers that include e-mail are:

home.netscape.com

www.microsoft.com

A handy guide to use for citing resources on the Internet is the Columbia Guide to Online Style at www.cas.usf.edu/english/walker/mla.html.

Net Classroom

Summary of Classroom Lesson 1

Monster Exchange

Mary Hildebrand, a fourth grade teacher at Poquoson Elementary School, used an activity called the "Monster Exchange" to incorporate the writing process and e-mail into her language arts lesson. Students drew monsters using geometric shapes and then wrote a detailed description of their monster in paragraph form. Students then e-mailed their descriptions to another participating class in the same school. Those students tried to draw the monsters from the written descriptions. The activity created a purpose for writing and using technology. Students learned the importance of writing clear and accurate descriptions.

The monster exchange address is:

www.win4edu.com/minds-eye/monster.

Virginia Computer/Technology SOL: C/T5.2, C/T5.3, C/T 5.4

Summary of Classroom Lesson 2

Titanic Research and Journals

In order to get eighth graders interested in research and writing, Karen W. Richardson and Connie Wright from St. Clare Walker Middle School came up with a project sure to grab attention. Each student drew the name of a person aboard the Titanic from a hat and used the Internet in order to take on the persona of that person through research. Students used the information they gathered to create things such as collages and journal entries. The Titanic website used, Titanic: Sinking The Unsinkable can be found at www.geocities.com/Nashville/Opry/1940.

Virginia Computer/Technology SOL: C/T8.1, C/T8.2, C/T 8.3, C/T8.4

Net Safety

Chat rooms are defined as Internet tools that allow a user to "chat" or type in real time over the Internet. They are places where you can meet interesting people, but they can also be tricky. It's best to use "moderated chat rooms" where a person monitors the post of room participants. An "unmoderated chat room" has no monitor. Emoticons can also be used to help ensure safety in chat rooms.

Additional Terms

- bulletin boards An electronic message center that usually serves specific interest groups. They allow you to dial in with a modem, review messages left by others, and leave your own message if you want.
- emoticon Short for "emotion icon", a small icon composed of punctuation characters that indicates how an e-mail message should be interpreted (that is, the writer's mood). For example, a :-) emoticon indicates that the message is meant as a joke and shouldn't be taken seriously. An emoticon is also called a smiley. Some other emoticons include:
 - : - 0 bored
 - ; -) winking
 - : - (sad
 - : - < frowning

Extension Ideas

- Have students describe a "monster" picture in an e-mail letter to a student at a different school. The student to whom the monster was sent should then draw the monster and scan that picture back into the computer to be sent to the original artist. The artist can then scan his

picture and send it to the other student so he/she can see how close he/she came to drawing the actual picture.

- In the Titanic lesson, students could keep the identity of the person they chose a secret. After having researched their person, clues may be given so that others can do an Internet search and try to uncover the identity of the "unknown" person.
- Have students research another disaster and keep a journal about one of the people involved.

Netfiles Program #105 Social Science Black History Month

Topics

- Web page design
- Graphics
- An html editor in action
- Using the internet to motivate students

Netspeak Terms

- **CGI** A CGI is a small program that takes data from a web server and does something with it, like turning data into a database query or content into an e-mail message.
- **GIF** (Graphic Interchange Format) A common format for image files, especially suitable for images containing large areas of the same color.
- **HTML** (Hyper Text Markup Language)
The coding language used to create Hypertext documents for use on the World Wide Web.

Netwise Summary

Designing web pages has been made easier with the use of electronic publishing on the internet. The first step is to create a storyboard, draw a picture, of what you want your page to look like. You can then begin building your page using an html editor which puts the tags in for you. Claris Homepage is an example of an html editor you can use to create your web page.

Net Classroom

Summary of Classroom Lesson 1

African American History

Cheryl Wolfred from Independence Middle School used the internet with her students to sharpen organizational skills and do computer exploration of

African-American History. Her students used a search engine to conduct a net search/query on Black History. The website Ms. Wolfred used is "Stamp on Black History" found at

<http://library.advanced.org/10320/stamps.htm#anchor305420>.

Virginia Computer/Technology SOL: C/T8.1, C/T8.2, C/T8.3, C/T 8.4

Summary of Classroom Lesson 2

Web Pages for Black History

History teacher Cecilia Baker of Arcadia High School uses the internet to get her students to read. Her students take interactive quizzes on the internet and use it for research and reading. Ms. Baker's class also designed web pages on Black History. Web sites used to design these web pages were:

African American History: **www.afroam.org/history/history.html**

Africans in America: **[www.pbs.org.wgbh/aia](http://www.pbs.org/wgbh/aia)**

The National Gallery: **www.nga.gov.connection**

The Library Congress, African Mosaic:

www.loc.gov/exhibits/african/intro.html

Virginia Computer/Technology SOL: C/T8.1, C/T8.2, C/T8.3, C/T 8.4

Netfiles Program #105 Social Science

Net Safety

With electronic publishing becoming more common in our schools, it's important to watch what information students are putting on the Web. Pictures and names of students should not be used when creating publications. Students need to abide by their school's Acceptable Use Policy to guide them in what is appropriate.

Extension Ideas

- Have students compile a list of Black History sites and critique them. Students can post their critiques on their websites.
- Create a scavenger hunt using the Black History websites. Have students work in pairs to complete the scavenger hunt.
- Have the class create a Black History webpage. Assign different tasks to individuals or partners. If students are able, they can assemble the webpage, or you can do that for the students.
- Use an online bookstore or library site to compile an annotated bibliography of about Black History. Share the list with other teachers.

Netfiles Program #106 Art & Music Applications Music in Our Schools Month

Topics

- Do's and don'ts of web page design
- Using the MAGIC lesson plans
- Creating a school webpage

Netspeak Terms

- **Animated GIF** A moving web graphic created by “stitching” together a series of GIF images.

- **Table** A device used to fine tune web page layout. This spreadsheet-like tool uses cells to place items on a web page in a particular place or location.

- **Homepage** The “welcome” or first page of a website.

- **Webpage** A single HTML document.

- **Website** A collection of related webpages served from the same site.

Netwise Summary

Do's and Don'ts of Webpage Design

DO

- Use a suite of tools to create the webpage. Suggested software includes Photoshop, Kidpix, Claris Works, Simpletext. IconBazaar has graphics
- Use a white or light background on dark text. This combination is easier for the reader to see.
- Use tables to place the graphic on the page.

DON'T

- Use a lot of animated GIFs.
- Make the front page more than 1 or 1 1/2 screens long. Be considerate of the viewers, and don't have them scroll through too much.
- Make the front page too wide; some viewers may have narrow monitors.

Net Classroom

Summary of Classroom Lesson 1

Using the MAGIC Lesson Plans

Rose Powers, a sixth grade teacher at Cresswood Middle School, Chesapeake Public Schools, used the MAGIC lesson plans with her students. MAGIC is an integration of music, art, and the internet. Students listened to a song from the tape, created a piece of art, then wrote about their artwork. The completed artwork and writing was posted on the MAGIC website. The students enjoyed expressing their feelings about their own artwork. Posting the work on the web was an added incentive. Rose discovered that posting the work on the website was easier than she thought it would be. She saw great improvement in students' writing skills.

Netfiles Program #106 Art & Music Applications

There are 15 MAGIC '99 lesson plans, one per song. Each plan includes an English component. Plans also include social studies or science, depending on the content

of the song. To access the lesson plans, go to www.netfiles.org, then click on Netclassroom Or, go directly to the MAGIC website at <http://www.magic99.org>.
Virginia Computer/Technology SOL: C/T8.1, C/T8.2, C/T8.3, C/T 8.4

Summary of Lesson 2

Creating a School Webpage

Hoyt Davenport teaches computer classes, including a computer animation class, at Jamestown High School in Williamsburg. The students enjoy using their imaginations to design on the computer. They like being the "guinea pigs" for the computer classes in the district. The students created a webpage for the school. One student put together a web-based CD to send to colleges. It shows programs, animations, pictures in AutoCad and general information.

Hoyt sees reading as an essential part of the curriculum. Students must read the tutorials to understand how to use the programs. Students also teach each other. He wants the students to have fun but learn at the same time.

The computer animation and graphics assignment sequence is available on the Netfiles website under Netclassroom. The Jamestown High School webpage address is <http://eag/e.jhs.wjcc.k12.va.us/public/>.

Virginia Computer/Technology SOL: C/T8.1, C/T8.2, C/T8.3, C/T 8.4

Net Safety

Copy-cat Websites to Avoid

People develop inappropriate websites with addresses/domains which are similar to the real websites. They may have one or more different letters in the address, or the domain may have been changed. The best methods of prevention are to be with the students when they are online, make sure you have the correct address, and to check out the website ahead of time.

Extension Ideas

- Have students create an individual, group, class, or school webpage.
- Have students animate their webpage.
- Show students several established webpages and have them critique the design of the pages. Students may want to create a rubric to use for all of the pages. They can post their critiques on their webpages.
- Use one or more of the MAGIC lesson plans.

Netfiles Program # 107 Science Earth Day Environment Projects

Topics

- Interactivity on websites: add email requests, forms, and guestbooks to a website
- Service learning projects that combine internet research, scientific data, and hands-on water testing to help the environment

Netspeak Terms

- **Java** A programming language developed by SUN Microsystems that is used for a variety of features on webpages. Java is non-platform specific; therefore, it works on all computer systems.
- **applet** An application running from within a web browser. A Java applet within a Java-capable browser would be Netscape or MS Internet Explorer.
- **GCI-** Common Gateway Interface. A program that can provide a variety of functions used by internet forms, guestbooks, and counters.
- **radio button and check box** A selection device on an internet form.
- **clickable image map** An image on a webpage that has "hot spots" on it that, when clicked, takes the user to another webpage or website.
- **mailto:-HTML-** Tag used to invoke an e-mail document.

Netwise Summary

Interactivity on the Web

The push now is to make webpages more interactive by sending data via forms, sending E-Mail, and using Java scripts. Tom shows the viewers how to use Claris Homepage and ClarisWorks to create an interactive clickable image map. He shows how to make a mail link by using the link editor in Claris Homepage, and how to make forms. Tom advises checking with the webmaster to find the CGIs that are used on the server. Java applets can turn a form into an email without using a separate CGI. Java applications can be found at the CNET site www.builder.com.

Net Classroom

Summary of Classroom Lesson 1

Problem Solving Using the Internet

Susan Walton at Peasley Middle School , Gloucester County Public Schools. and Dr. Maurice Lynch, from the Virginia Institute of Marine Science, Chesapeake Bay Estuary Reserve, developed a problem-based activity on fishkill. Students were challenged to look at a species of fish, the Menhaden, and figure out how it interacts with its environment and why so many fish were dying. Students had to figure out how to find the answers on their

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own. They followed a rubric with specific items they had to include in their reports. Students discovered that the problem was caused by a natural phenomenon--the summer was unusually hot and caused the water temperature to rise, killing the fish. The Netfiles website provides a link to the Baylink site. The URL for Dr. Estuary at VIMS is <http://www.vims.org>. The Baylink address is <http://www.baylink.org>.

Virginia Computer/Technology SOL: C/T8.1, C/T8.2, C/T8.3, C/T 8.4

Summary of Classroom Lesson 2

Elizabeth River Studies

Jenny Sue Flannagan at Kemps Landing Magnet School, Virginia Beach Public Schools, attended a State of the River meeting and developed a plan for getting students involved in service learning. She wanted her students to be trained to conduct water quality tests of the Elizabeth River. Jenny Sue worked with Debra Rollins, a technology colleague, they taught the students how to place the data on a website called Student Power. Students were divided into four groups: developing a water manual, teaching the elementary students how to test the water, organizing an Elizabeth River Day Festival, and making a Power Point presentation about the problems with pollution in the river. The service learning was rooted in the curriculum but the application was in the real world. Students said it was the best experience they ever had.

Virginia Computer/Technology SOL: C/T8.1, C/T8.2, C/T8.3, C/T 8.4

Net Safety

Filtering software is available for networked computers. Check with the school administrators for information regarding individual schools and districts.

The new "smart" browsers will remember and complete previously visited website addresses if they are partially entered.

Microsoft Internet Explorer now allows the user to print only one page of a website instead of printing the entire site.

Extension Ideas

- Have students conduct water quality tests on a body of water near their homes or the school. Post the results on the class webpage.
- Get involved in another environmental activity, such as Clean the Bay Day. Search the Internet for information.
- Assist students in finding an environment-related local problem and then doing Internet research to find a solution.
- Have students E-Mail students in another area who are also involved in environmental studies and projects. Students can exchange ideas and share research findings.

Netfiles Program # 108 Math Math Magic Month

Topics

- Math on-line.
- How to get a webpage on a website.
- Uploading files.
- Developing a school intranet.
- Using an FTP client.

Netspeak Terms

- **upload** Transfer of files from your computer to a remote computer.

- **directory** Place on a computer where specific files are located.

- **FTP** File Transfer Protocol. The activity of transferring files to remote computers. Popular FTP software programs that transfer files include Fetch and CuteFTP.

- **intranet** An “internal internet” system that provides information to members of an organization that is not available to the general public.

Netwise Summary

Once you build a webpage, you conduct an FTP, or upload, of the file to a server to get it online. Fetch, for the Macintosh, will drop the files onto a webserver. Windows programs can be accessed online at Download.com. This site has several FTP clients from which to choose. Most are shareware. The webmaster will give you a directory, or a place to put the webpage. Developing the webpage to the floppy disk to make it easier to upload everything.

An intranet can make the files internally available; for example, to other classes in the school. It's safer to put students' names and pictures on an intranet system, because people from outside can't get access without a password.

Websites created on floppy disks can be shared without having access to a webserver. Put the floppy disk containing the webpage in a computer with Internet access. Go to the browser, then to the floppy disk and open the page. It will show up in the browser and the user can link to the Internet.

Net Classroom

Summary of Classroom Lesson 1

Mary Anne Sherkey, a teacher at Northampton High School, is relatively new at using the Internet to teach. Many of her students had never used the Internet before this assignment. Students were given a form to follow, as well as a grading sheet. They had to collect 30 or more pieces of data, then construct both a box and whiskers plot and a stem and leaf plot, and then write their conclusions. Topics were selected by the students according to their own interests. Some students took two days to find their topics. Students thought the project was fun.

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Some of the sites the students used are:

Tech Algebra Statistics Project

weather-<http://weather.com>

NASCAR-<http://www.nascar.com>

Movies-<http://www.filmiland.com/boxoffice>

Pro Teams-<http://www.nba.com>; <http://www.nfl.com>;

<http://www.majorleagueball.com>

Presidents-<http://www.whitehouse.gov>

Virginia Computer/Technology SOL: C/T8.1, C/T8.2, C/T8.3, C/T 8.4

Summary of Classroom Lesson 2

Norfolk Academy teacher Stephany Faulkner had her geometry students conduct a math scavenger hunt. Students see the Internet as a valuable educational tool. Ms. Faulkner sees the Internet as a resource for teachers, who are able to share ideas and feel more connected to other teachers. She has been using the Internet in her classroom for about five years. Initially, she spent hours getting ready for class, but now prepares more quickly.

For the scavenger hunt, the students were challenged to answer the questions, give the complete URL address, and tell how they got there. Students had a choice of search engines, including Ask Jeeves, Infoseek, and Yahoo. Students were cautioned to spell correctly when entering information. They were surprised that there was so much information about geometry available on the Web. Ms. Faulkner used a rubric to grade students' work.

Math websites used to develop the scavenger hunt are:

Math Forum <http://forum.swarthmore.edu>

Ask Dr. Math <http://forum.swarthmore.edu/dr.math>

Virginia Computer/Technology SOL: C/T8.1, C/T8.2, C/T8.3, C/T 8.4

Net Safety

Downloading files and E-Mails can expose a computer to viruses. Avoid getting a virus by downloading from familiar sites and checking the files ahead of time.

The Virus Bulletin is a website that describes viruses and ways to get rid of them. The Symantec site also has information about viruses and virus hoaxes.

Extension Ideas

- Have students create a math or other subject area scavenger hunt. Each student can contribute a few questions, and the teacher can assemble them into a scavenger hunt.
- Have students create a webpage on a floppy disk and share it with other students.
- Hold a discussion about using the Internet vs. using an intranet. Have students take sides and use factual information to support their positions.

Netfiles Program #109 Science **Summer Projects**

Topics

- E-mail exchange with students in the Netherlands
- Webquest: living near an earthquake or a volcano
- Things to do and sites to visit during the summer
- How to be web-savvy parents

Netspeak Terms

None on this program.

Netwise Summary

Yahoo has a site called "Local." Pick a state and the site will show information about that state's weather, communities, employment, entertainment, etc.

Mapquest has maps as well as traveling and driving directions.

Mapblast has local, state, and world maps.

The Discovery Channel has a website that talks about their television shows.

The Smithsonian Institution, Exploratorium, and National Geographic have websites.

Each major league sports team has a website.

MP3 has music that can be listened to online.

The sites mentioned are:

<http://local.yahoo.com>

www.mapquest.com

www.mapblast.com

www.si.com (Smithsonian)

www.nationalgeographic.com

www.exploratorium.com

www.theorioles.com

www.mp3.com

www.discovery.com

Net Classroom

Summary of Classroom Lesson 1

Great Neck Middle School, Virginia Beach Public Schools, teacher Rick Swift involved his students in an E-Mail communications project. The project was designed by Intercultural E-Mail Classroom Connection Group at the University of Amsterdam. The purpose was to help students learn English. Each of Mr. Swift's students was paired with a student in the class in the Netherlands. The students exchanged E-Mail letters for five months. Students were encouraged to use proper sentence structure, grammar, and spelling, which improved their own writing skills. Mr. Swift's students thought the project was fun. The enjoyed

learning about another culture. Mr. Swift liked integrating technology with writing skills.

The site address for International Classroom Connection is:
<http://www.iecc.org>.

Virginia Computer/Technology SOL: C/T8.2, C/T8.3

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Summary of Classroom Lesson 2

Webquest: Earthquake vs. Volcano

Debra Rollins at Kemps Landing Magnet School, Virginia Beach Public Schools, took students on a Webquest .The lesson plans are on the Web, and sites for the Webquest are established before students begin working;. The links have already been researched. Students had to decide if they would rather live near a volcano or an earthquake. They worked in groups of four to research four sites relating to volcanoes and earthquakes. Students then wrote position papers, saved them to the server, and defended their postions in class.

Many of the Webquest sites have built-in rubrics.

The site address for Earthquake vs. Volcano is:

<http://kn.pacbell.com/wired/fil/pages/webearthcie.html>

Another Webquest Site is: **<http://edwebsdsu.edu/webquest/webquest.html>**

Virginia Computer/Technology SOL: C/T8.3, C/T 8.4

Net Safety

Use filtering software. Many Internet providers are also providing filtering tools. Parents can see where their children have gone by going to “History” in the browser software. This will show which sites the child has used for the past nine days.

Extension Ideas

- Use one or more of the Webquests with students.
- Work with another teacher to design a Webquest.
- Involve students in an E-Mail exchange project.

State of Virginia Computer/Technology Standards by the End of Grade Five

- C/T5.1 The student will demonstrate a basic understanding of computer theory including bits, bytes, and binary logic.
- C/T5.2 The student will develop basic technology skills.
- Develop a basic technology vocabulary that includes cursor, software, memory, disk drive, hard drive, and CD-ROM.
 - Select and use technology appropriate to tasks.
 - Develop basic keyboarding skills.
 - Operate peripheral devices.
 - Apply technologies to strategies for problem solving and critical thinking.
- C/T5.3 The student will process, store, retrieve, and transmit electronic information.
- Use search strategies to retrieve electronic information using databases, CD-ROMs, videodiscs, and telecommunications.
 - Use electronic encyclopedias, almanacs, indexes, and catalogs.
 - Use local and wide-area networks and modem-delivered services to access information from electronic databases.
 - Describe advantages and disadvantages of various computer processing, storage, retrieval, and transmission techniques.
- C/T5.4 The student will communicate through application software.
- Create a 1-2 page document using word processing skills, writing process steps, and publishing programs.
 - Use simple computer graphics and integrate graphics into word-processed documents.
 - Create simple databases and spreadsheets to manage information and create reports.
 - Use local and worldwide network communication systems.

State of Virginia Computer/Technology Standards by the End of Grade Eight

- C/T8.1 The student will communicate through allocation software.
- Compose and edit a multipage document at the keyboard, using word processing skills and the writing process steps.
 - Communicate with spreadsheets by entering data and setting up formulas, analyzing data, and creating graphs or charts to visually represent data.
 - Communicate with databases by defining fields and entering data, sorting, and producing reports in various forms.
 - Use advanced publishing software, graphics programs, and scanners to produce page layouts.
 - Integrate databases, graphics, and spreadsheets into word-processed documents.
- C/T8.2 The student will communicate through networks and telecommunication.
- Use local and worldwide network communication systems.
 - Develop hypermedia “home page” documents that can be accessed by worldwide networks.
- C/T8.3 The student will have a basic understanding of computer processing, storing, retrieval and transmission technologies and a practical appreciation of the relevant advantages and disadvantages of various processing, storage, retrieval, and transmission technologies.
- C/T8.4 The student will process, store, retrieve, and transmit electronic information.
- Use search strategies to retrieve electronic information.
 - Use electronic encyclopedias, almanacs, indexes, and catalogs to retrieve and select relevant information.
 - Use laser discs with a computer in an interactive mode.
 - Use local and wide-area networks and modem-delivered services to access and retrieve information from electronic databases.
 - Use databases to perform research.

Websites for State Departments of Education or Instruction.

State standards and curriculum are available at these websites.

Alabama Dept. of Education - www.alsde.edu

Colorado Dept. of Education - www.cde.state.co.us

Colorado State Board of Education - www.cde.state.co.us/board.htm

Missouri

Dept. of Elementary and Secondary Education -

<http://services.dese.state.mo.us> (NOTE no "www.")

Missouri Consultants for Education: Board Policy Service -

www.moconed.com

North Carolina Public Schools Info Web - www.dpi.state.nc.us (even has a link site for Odyssey of the Mind!)

Nevada Dept. of Education - www.nsn.k12.nv.us/nvdoe