

INTRODUCTION

- The home page for this course is located at: <http://sky.prohosting.com/mansterg/web-design-course/>
- This course was designed as an enrichment tool for gifted and high-achieving students in Grades 4-8.
- The series of five background lessons that follows was taught by the school's SERT/webmaster, in weekly 40-minute sessions.
- Following the completion of these lessons, students began work on the development of class web pages for inclusion in the school's home page, in consultation with their teachers.
- Developing and maintaining their class web pages, using the software *Dreamweaver*, was the students' primary enrichment activity for the remainder of the school year.
- Students were also called upon to "tutor" teachers and their classmates in the fundamentals of web page design, using *Dreamweaver*.
- The following are the IEP SMART goals related to this course:
 - Alternative Curriculum Annual Goal
_____ will create a functioning class web page for his/her teacher that includes three sub-pages and links to five resources.
 - By the end of Term 1, in consultation with his/her teacher, _____ will use *Dreamweaver* software to create main page for a class page that includes two different font sizes, a bulleted list, a horizontal rule and a digital image.
 - By the end of Term 2, in consultation with his/her teacher _____ will use *Dreamweaver* software to add two sub-pages to the class page, add textual content to all three pages and create links to five resources elsewhere on the web.
 - By the end of Term 3, _____ will have his/her final layout approved by the teacher, school webmaster and Principal, upload it to the school website and begin to update the page, as required by the teacher.

LESSON 1: What's the Internet All About?

In this lesson, students will go online to complete a “scavenger hunt” that provides them with a brief history of internet development and some terminology they will use when designing their own web page.

Materials needed: A piece of chart paper, two colours of markers, a student-copy of the *Lesson 1: Scavenger Hunt* (<http://sky.prohosting.com/mansterg/web-design-course/Lesson1-StudentHandout.pdf>) for each student or pair of students, internet access for students

- Internet Brainstorm (5 minutes)
Ask students to name as many internet-related terms as possible (e.g. WWW, web page, HTML, e-mail, Facebook, E-Bay). Record responses on a piece of chart paper. Briefly discuss. *Did the students demonstrate a knowledge of internet history? Did they distinguish between the Internet and the World Wide Web? Did they offer many terms related to web page design?*
- Online Scavenger Hunt (30 minutes)
Provide each student or student-pair with a copy of the Lesson 1 Scavenger Hunt. Tell students that this handout will provide them with a brief history of the internet and some essential terminology that they will use when designing web pages. Ask students where they think they should go to look for the Scavenger Hunt answers. *(They should go online and input key words from the questions into a search tool such as <http://www.google.ca>).*
- Wrap-up: Return of the Storm (5 minutes)
Ask students to return to look at the brainstorm they completed at the beginning of the lesson and offer new terms that they learned during this lesson. Write these on the chart paper in a different colour than their initial list of terms.
- Follow-up
If students did not complete the Scavenger Hunt, ask them to do so prior to next class and come prepared to play a game of “Jeopardy” with their answers.

LESSON 2: Web Page Perfection

In this lesson, students will begin to think about what elements contribute to effective web page design.

Materials needed: Student-copies of last week's Scavenger Hunt (<http://sky.prohosting.com/mansterg/web-design-course/Lesson1-StudentHandout.pdf>), a teacher's edition of the Scavenger Hunt (<http://sky.prohosting.com/mansterg/web-design-course/Lesson1-TeachersAnswerSheet.pdf>), a copy of Emily Ricketts' article "Planning your web site design" (http://www.adobe.com/support/dreamweaver/layout/site_planning/) and a highlighter (or internet access and a pencil and paper) for each student, last week's internet terminology brainstorm and a marker (a colour not used last week).

- **Scavenger Hunt Jeopardy** (15 minutes)
Break students into pairs or teams. Tell them that we will be taking up their Scavenger Hunt responses "Jeopardy-style." Tell them that teams will receive one point for every right answer, will lose one point for every incorrect answer and will not score or lose points if they remain silent. Read the questions in random order. Students may confer with their team mates and/or their notes prior to responding. The first team to indicate that they have an answer, by putting raising a hand, may respond in the form "What is...?" If they are correct, they receive one point; if they are not, they lose a point and another team is given an opportunity to respond. Continue play until all the questions have been answered.
- **"Page Design 101"** (20 minutes)
Provide each student with a paper copy of the article, "Planning your web site design" and a highlighter (or have students read the article online and take notes). Tell students their assignment is to list what they think are the top three web page design considerations, based on their reading of the article.
- **Wrap-up: The Storm, Part 3** (5 minutes)
Ask students to add to the list of internet terminology they began in Lesson 1, based on what they learned during today's lesson. Add today's terms to the chart paper in a third colour.
- **Follow-up**
If students didn't complete today's reading assignment, ask them to do so prior to next class. Ask them to come to class prepared to discuss what they think are the top three considerations in web page design.

LESSON 3: "The Good, the Bad and the Ugly"

In today's lesson, students will prioritize what they feel are the most important elements contributing to effective web page design and look online for examples of pages that meet and do not meet these criteria.

Materials needed: Student-copies of last week's article, "Planning your web site design"

(http://www.adobe.com/support/dreamweaver/layout/site_planning/), a pad of post-it notes, pencils, a piece of chart paper with an x- and y-axis drawn on it (it will become a bar graph), a marker, a copy of the Lesson 3 "The Good, the Bad and the Ugly" chart (<http://sky.prohosting.com/mansterg/web-design-course/Lesson3-StudentHandout.pdf>) for each student or student-pair, and a copy of Dan Raggett's article, "Getting Started with HTML" (<http://www.w3.org/MarkUp/Guide/>) for each student.

- **"Makin' it Work": Brainstorming & Prioritizing** (10 minutes)
Provide each student with three post-it notes. Ask students to record one element that they feel is essential to good web page design on each post-it note. When students have completed this task, ask a student to volunteer one idea. Record it on the chart paper, as an x-axis bar graph label, and have everyone with this idea stick his/her note above the label (forming the first bar, on the graph). Have another student offer an idea, and create a second bar on the graph, as per the first. Continue asking for ideas and having students post their notes on the graph until all the students' post-it notes are on the graph. Ask students to help complete the graph by adding a title and x/y-axis labels. Discuss the results. *Was there a clear consensus? Is there a need for debate? Were some students swayed by others' ideas?*
- **Quest for the World's Best (and Worst) Web Page** (15 minutes)
Provide each student or student-pair with a copy of the Lesson 3 "The Good, the Bad and the Ugly" chart. Have them write the top three web page design considerations, from the previous exercise, into the appropriate place on the chart. *If a consensus was reached by the group, all students will use the same criteria; if not, then students can use what they feel are the top three criteria.* Ask students to go to <http://www.google.ca> and enter a topic of their choice into the search field. Then, have them surf through the first ten web pages on Google's list and identify what they feel is the "best" and "worst" page, in terms of the design criteria on their chart. Have students complete the information on their charts and tell them to be prepared to share their results with the class.
- **Wrap-up: "Show and Tell"** (15 minutes)
Have each student or student-pair go online and share his/her/their "worst" and "best" examples of web page design with the class, briefly explaining how he/she/they came to this conclusion.
- **Follow-up**
Tell students that, next class, they will be constructing a very basic web page, on a word processor. Tell them that, in order to do so, they will need some background knowledge about the way hypertext markup language (HTML) works. Their assignment is to read the article "Getting Started with HTML," prior to next class, highlight important information and bring the article back to class.

LESSON 4: HTML-speak

Although students won't normally create web pages by typing HTML into a word processor (*typically, they will use a web page creation program, such as Dreamweaver*), constructing HTML from scratch as a learning exercise provides students with an essential understanding of HTML syntax. This knowledge will enable students to correct/customize elements in their own web page, by altering the source code, and to analyze the source code of design elements they find appealing in others' web pages, with a view to incorporating them into their web page.

Materials needed: Student-copies of the article "Getting Started with HTML" (<http://www.w3.org/MarkUp/Guide/>) from last week's class, chart paper, a marker, computer access for each student, a copy of Lawrence Univ.'s *Dreamweaver MX Guide* (<http://www.lawrence.edu/dept/ITS/services/guides/Dreamweaver.shtml>) and Macromedia's *Dreamweaver MX Quick Reference Guide* (http://download.macromedia.com/pub/documentation/en/dreamweaver/mx2004/dw_shortcuts_win.zip).

- **"Syntax 101"** (5 minutes)
Ask students to share with a partner the most important information in the article "Getting Started with HTML", which they were asked to read prior to this week's lesson. Have each pair share what they discussed. Record their responses on chart paper.
- **Giving it a Go** (15 minutes)
Have students move to computers, log-in, and open up the word processing program and *Internet Explorer*. Ask to type the following into the word processor and then save it (*you may wish to write this on the board, rather than dictate it aloud*): `<P>My name is _____ . This is my first web page!</P>` Next, have students go to *Internet Explorer* and click on "File," "Open" and "Browse," locate their word processor file and open it in *Internet Explorer*. If they typed the text correctly, it should appear on-screen, without displaying any source code. If not, then source code "gibberish" will appear. Have students go back into their word processor file and, using the article as a guide, try to add boldface and italics to their text. After each step, have them save the file and then refresh their *Explorer* screen, so they can check their work. Once they are successful at adding boldface and italics, ask them to add another feature.
- **Source Code: Taking a Look at "The Real Deal"** (5 minutes)
Have students hit the "Home" button on *Internet Explorer*. This should take them to the school's web page. Have them click on "View" and then "Source" in *Internet Explorer*. This will open up a new window that will display the page's HTML code. Examine it together, looking for elements with which the students are now familiar. Explain that knowledge of HTML will help them customize and correct their future web pages, as well as examine interesting design elements in others' pages that they may wish to add to their pages. (*NOTE: If source-viewing is blocked in Internet Explorer, try opening up a web page in the word processor.*)
- **Wrap-up/Follow-up: Weavin' Dreams** (15 minutes)
Give each student a copy of the *Dreamweaver MX Guide* and *Dreamweaver MX Quick Reference Guide*. Familiarize them with the documents and give them time to explore on their own. Next class they will use these guides to help them alter a sample web page, using *Dreamweaver*.

LESSON 5: Dream-weaver-ing and Planning

During this lesson, students will modify a page from the school web site (*or another sample page of your choice*) using the web page creation program *Dreamweaver* and begin to draft a framework for their own web page.

Materials needed: A sample web page for students to modify with *Dreamweaver* (*copy the HTML file and its components into each students' network file ahead of time*), student-copies of Lawrence Univ.'s *Dreamweaver MX Guide* (<http://www.lawrence.edu/dept/ITS/services/guides/Dreamweaver.shtml>) and Macromedia's *Dreamweaver MX Quick Reference Guide* (http://download.macromedia.com/pub/documentation/en/dreamweaver/mx2004/dw_shortcuts_win.zip) from last week , computer access for each student, a copy of the *Lesson 5: Web Page Planner* (<http://sky.prohosting.com/mansterg/web-design-course/Lesson5-StudentHandout.pdf>) for each student or student-pair.

Messin' with Success (15 minutes)

Ask students to take their copy of the *Dreamweaver MX Guide* and *Dreamweaver MX Quick Reference Guide* (provided last class) to a computer, log-in, open *Dreamweaver* and *Internet Explorer*. Then, have students open up the sample web page you copied to their network directory, with *Dreamweaver*. Referring to their tutorial guide, ask students to modify the page by changing text sizes/fonts, deleting elements, adding a table, etc. The idea is to experiment with the software, not necessarily to improve the layout of the page. After each change, students should save the file and then open it in *Internet Explorer* so they can see how it looks. (*NOTE: Please assure students that changes they make will not appear on the school website. In order for that to happen, the altered page would have to be uploaded to the server by the webmaster*). After this initial exposure to *Dreamweaver*, students will be ready to try creating a new web page, using the software.

The Plot Thickens (15 minutes)

Provide each student or student pair with a copy of the *Lesson 5: Web Page Planner*. Read the list of IEP SMART goals (*listed on the first page of this guide*) with students, so they understand their web page creation assignment and its timelines. You may wish to print a copy of these goals on the back of the planning sheet for the students' ongoing reference. If you have any design guidelines vis a vis how this page will fit into the school web site, provide this information to the students [e.g. the page will have to fit into an existing frames layout, and must not be too wide to fit on our school's desktop computer screens (resolution 600 X 800 pixels), so YOUR maximum page width should be ___ pixels and YOUR maximum image size should be ___ X ___ pixels]. Have students develop a proposal for their class web page structure on the planning sheet.

Wrap-up: "Show and Tell" (10 minutes)

Ask students to share their initial class web page plans with the group. Invite those listening to offer constructive feedback to their classmates.

Follow-up

Have students or student-pairs meet with the appropriate teachers, prior to next class, to have their initial design proposal approved. In future lessons, students will begin to develop their proposal using *Dreamweaver*, as per the IEP SMART goals and in close consultation with their classroom teachers.

ADDITIONAL RESOURCES:

Dreamweaver MX Tutorials

The program contains a series of tutorials that teach how to navigate the program and perform a variety of tasks. To access these, open Dreamweaver, click on "Help" and then click on "Tutorials." There is a link within the program to additional tutorials on the Adobe website, as well.

Dreamweaver Support Documentation

The Adobe website contains a number of support documents related to Dreamweaver MX. They are located at:

<http://www.adobe.com/support/documentation/en/dreamweaver/documentation-mx.html>

Web Page Design Checklist

(Includes a list of other design resources at the end of the document)

<http://ali.apple.com/als/mmcheck/WebPageDesignChecklist.pdf>

GR Sites

Free archive of backgrounds, web graphics, buttons, logos, menus and textures

<http://www.grsites.com/>

Microsoft Office Online Free Clip Art, Photos, Animations and Sounds

<http://office.microsoft.com/en-us/clipart/default.aspx>

Classroom Clip Art

Free clip art, clip art pictures, royalty-free photographs and illustrations

<http://classroomclipart.com/>