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ABSTRACT

Suggesting that the World Wide Web (WWW) is a tool that "ordinary" teachers and students can use to promote content learning and literacy development, this paper describes how the WWW can serve as a catalyst and tool for intermediate-grade teachers on up to share ideas and improve literacy. After briefly discussing recent articles in the professional literature for teachers that explore publishing on the Internet, the paper explains some of the benefits, in terms of literacy theories and practices, of helping students place their writing on WWW so that they can write for genuine purposes and to real audiences. The paper then describes procedures developed at Washington State University to help preservice teachers to place six of their co-authored or individual literacy-related writing assignments on the WWW. The paper then presents nine steps to adapt those procedures to other classrooms. Contains 3 figures and 19 references. Appendixes present directions (based on the computing hardware and software at Washington State University) for putting word-processed documents onto the WWW; linking web pages; overcoming software glitches; attaching mail tags; and putting photographs on a homepage. (RS)

Using the World Wide Web to Promote Literacy Development and Learning Communities: Guidelines and Directions for Teachers

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Using the World Wide Web to Promote Literacy Development and Learning Communities: Guidelines and Directions for Teachers

Double-barreled Question: [a] Is use of the WWW for the technologically elite or [b] is it a tool that "ordinary" teachers and students in public and private schools and in higher education can use to promote content learning in general and literacy development in particular?

Our answers are "no" to [a] and "yes" to [b]. Our purposes here are, first, to explain some of the benefits, in terms of literacy theories and practices, of helping students place their writing on WWW so that they can write for genuine purposes and to real audiences [Tompkins and Hoskisson, 1995]; second, to describe our efforts helping preservice teachers to place six of their co-authored or individual literacy-related writing assignments on the WWW; and, third, to offer, on the basis of our experience, advice [and sample directions in an Appendix] so that other teachers can help their students place some of their classwork on the WWW. Our remarks pertain primarily to the writing capabilities of students in intermediate grades on up, although we refer to writing preservice teachers have produced for k-6 and for middle and secondary school students.

In the Appendix are sample sets of detailed directions for such technical matters as "putting word-processed documents onto the WWW . . . building Web pages . . . attaching mail tags to title/index pages . . . putting author photographs on home pages."

Recent Developments. In the past few years, an increasing number of related articles have appeared in the professional literature. John December's (1994) article in Educational Technology was one of the first professional publications for teachers that explored publishing on the Internet. December described uses of such technologies as e-mail and World Wide Web and presented four case studies illustrating how people can use the Internet to make information widely available to readers. Chrobrak (1995) offered advice about building a WWW homepage for individual school buildings. Included in her article were ideas for installing a WWW browser and a sample lesson plan which included objectives, procedures, and evaluation. Dyrli and Kinnaman (1995) explained what they felt teachers

should know about local area networking [i.e., among classrooms or buildings within a school district] and global communications. They presented various reasons why teachers should connect their classrooms to the Internet or commericial online systems and how World Wide Web and browing software may revolutionize teaching and learning.

In October 1995, Anderson-Inman began a "Technology Tidbits" Department in the Journal of Adolescent and Adult Literacy "to open a window ... onto ideas for using technology in ways that support your goals as a teacher . . . . so that [teachers will] be better informed about the potential that technology brings to the teaching and learning process . . . . [and] will want to try more." Shotsberger (1996) noted that more and more teaching-related WWW sites are being developed and offered ideas related to "good design" [e.g., many shorter Web pages with few links than a few long pages with many links]. He concluded by stating that "student work, the centerpiece of any course, should be prominently displayed in instructional sites."

In terms of instructional materials for teachers, commercial products are being developed at a rapid pace. Classroom Connect: The Internet Made Easy in the Classroom is a monthly 20 page newletter for k-12 educators containing helpful short articles and advertisements. Further information about it can be obtained by e-mail: connect@classroom.net or by URL at http://www.classroom.net

On the classroom level, teachers and their students have joined networks and globally shared their visual art combined with storytelling and writing. Teacher Kristi Rennebohm Franz (1996) and her primary grade pupils in Pullman, WA., began collaborating on the International Education and Resource Network (I*EARN) with schools around the world as early as January 1993. Their global communication involved science water habitat projects and social studies, geography, and social action projects. Their subsequent Global Art Projects/GAP, shared with ten schools of the I*EARN network, centered on A Sense of Family and Habitats: A Sense of Place themes. These GAP's involved "parallels" between pupils' drawings and their storytellings and explanations put in writing and also united children, teachers, families, and communities around the world by means of shared art and writing.

Benefits to Teachers and Students

The benefits of students collaborating to place their work up on the WWW and to receive feedback and critique from outside audiences are myriad. Major elements of the endeavor necessarily involve students in writing for genuine purposes and to real audiences (Tompkins and Hoskisson, 1995).

Above all, having students co-author some of their assignments and participate in other team-writing projects gives them a powerful exposure to functioning within "a literate environment" that becomes a community of learners (Glover and Sheppard, 1989; McCaleb, 1994; Peterson, 1992). Students collaborate in the various phases of the writing process [brainstorming, topic selection, concept-connecting, rough drafting, peer editing, revision, final drafting, and publishing]. Tierney and O'Flahaven (1989) described a community of learners as a literate environment, where "members facilitate their own and each others' learning by sharing, offering support, suggesting possibilities, and evaluating ideas in a social context." Rousculp and Maring (1992) observed that a community of learners who focus on literacy processes becomes "a dynamic classroom community that is rich in social relationships, in partnerships, and in collaborations involving talking, reading, thinking, and writing." Maring (1993) further noted that

> a community of learners does not exist at the beginning of a class. Rather, it forms in the middle and in the end of the course . . . . it is a Spirit . . . . it is a group where friendships begin and deepen and endure . . . .it is an opportunity for partnerships and for dialog . . . it is inclusive of diversity . . . . it grows in a place where there are celebrations.

The challenge of putting writing projects [that are co-authored and are a true challenge to construct . . . which are clearly useful to others and which are the result of meaningful inquiries into the available literature of the content area being explored] up on the WWW helps individual students in a course become bonded into an enthusiastic learning community. However, a learning community will not be achieved if the co-learners feel the effort involves "busy work," work that is simplistic or "regurgitational" (Harste, 1977), or entries and writing on the WWW that are of little real value to them or anyone else.

Preservice Teachers Put Their Theme Cycles, Literature Focus Units, and Content Literacy Units and Strategies on the WWW

The use of computers and the World Wide Web by preservice teachers (in Washington State University's Education College of Education) was pioneered in the area of literacy methods by involvement in two specific courses: Survey of Elementary Language Arts and Reading (Teaching &Learning/T&L 306) and Content Literacy in Middle and Secondary Schools (T&L 450--2 sections). The students and the teacher of these classes worked together as learning community members, developing literacy strategies and other teaching ideas for themselves and for other educators. We decided to put up on the WWW six categories of assignments: traditional and integrated units [each with embedded content literacy strategies and service learning dimensions, collaborative research projects, service learning reflective essays [required as part of T&L 450], literature focus units (Thompson and Hoskisson, 1995), and theme cycles (Altwerger and Flores, 1994; Gambrell et al., 1988; Goodman, 1986). Traditional units were developed by writing teams of students who were exploring in the same subject area, while integrated units were developed by groups of students from differing subject areas. Collaborative research projects were of a smaller scale and involved the development of related "quickdraw" reading and literacy strategies, which are shorter and less-detailed than the literacy strategies developed within the traditional and integrated units. The elementary reading course completed similar units in keeping with the written guidelines they were provided for the creation of theme cycle or literature focus units. We spent over half of our class time working in one of our College's two computer labs that was designated for WWW and other applications more sophisticated than basic word processing.

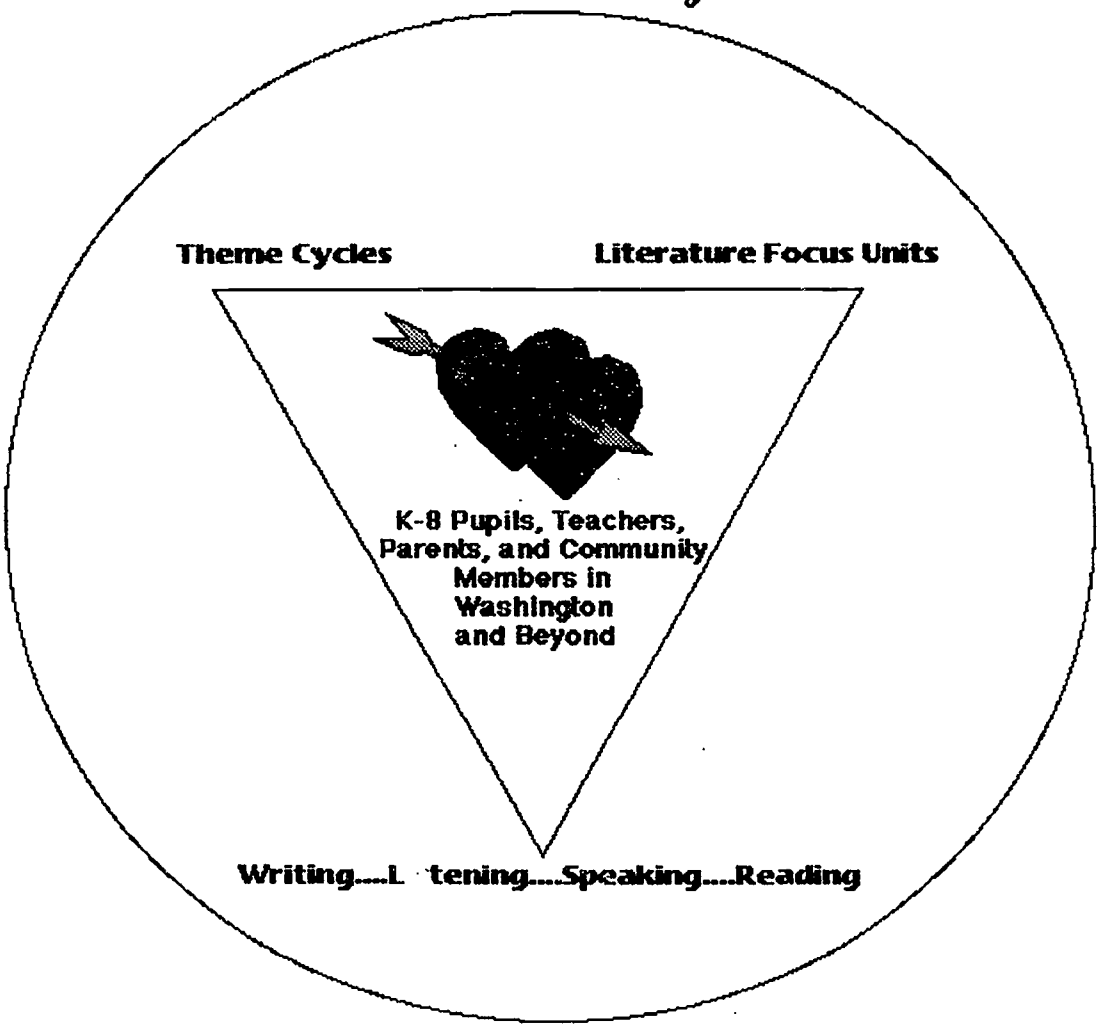
In order to make the literacy strategies developed within the three classes accessible to other teachers for their adaptation and use and to receive feedback from them, it was decided that use of the Internet would be an effective means of communication with teachers statewide and beyond. For our general systems design, we relied on the expertise of Marc Fleisher, one of our College's two technology consultants. In addition, within the classes, three students emerged and identified themselves as having considerable

background and interest in computer technology. They indicated during a first class session that that they would sincerely enjoy taking the leadership and service learning opportunity to build a system and help their classmates get their written work up on the WWW. One of them, Dawn Hanson, came up with a title for the three, and henceforth, we referred to them as our "tech experts." Other students had various levels of working knowledge, but most in the elementart language arts class knew only how to word process and felt themselves "pretty much computer illiterate." One student, who became extremely enthusiastic by the end of the course ["this is greatest thing to do"] began the language arts class by wanting to know if she could "use [her] typewriter to do her assignments." She stated that she did "not even know how to use a MacIntosh or any other computer, for that matter."

Relying on our technology consultant, our three class "tech experts," and other more experienced students within the classes, a development structure for putting documents on the WWW was created. Class title/home pages were developed by the instructor and "tech experts" for both the elementary and secondary classes, and the various assignment categories developed by smallgroups of students were linked to the class title page in "table of content" formats for viewing on the WWW [See Figure 1]

FIGURE 1

A Home Page Diagram For One of Our Classes:



Typical linking tables from one class's home page:

Theme Cycles

Theme Cycles	Theme Cycles
Writing About Dinosaurs	A Global Neighborhood
Community of Learners: Building Bridges	The Rev. Martin Luther King Jr.: A Dreamer for Equal Rights
Plants We Eat	Washington State and Its Surrounding Neighbors

Traveling: All the Places You Will Go	Research and Writing About Dinosaurs
Environmental Awareness	Exploration in History

**Web users click on the titles they want to browse.

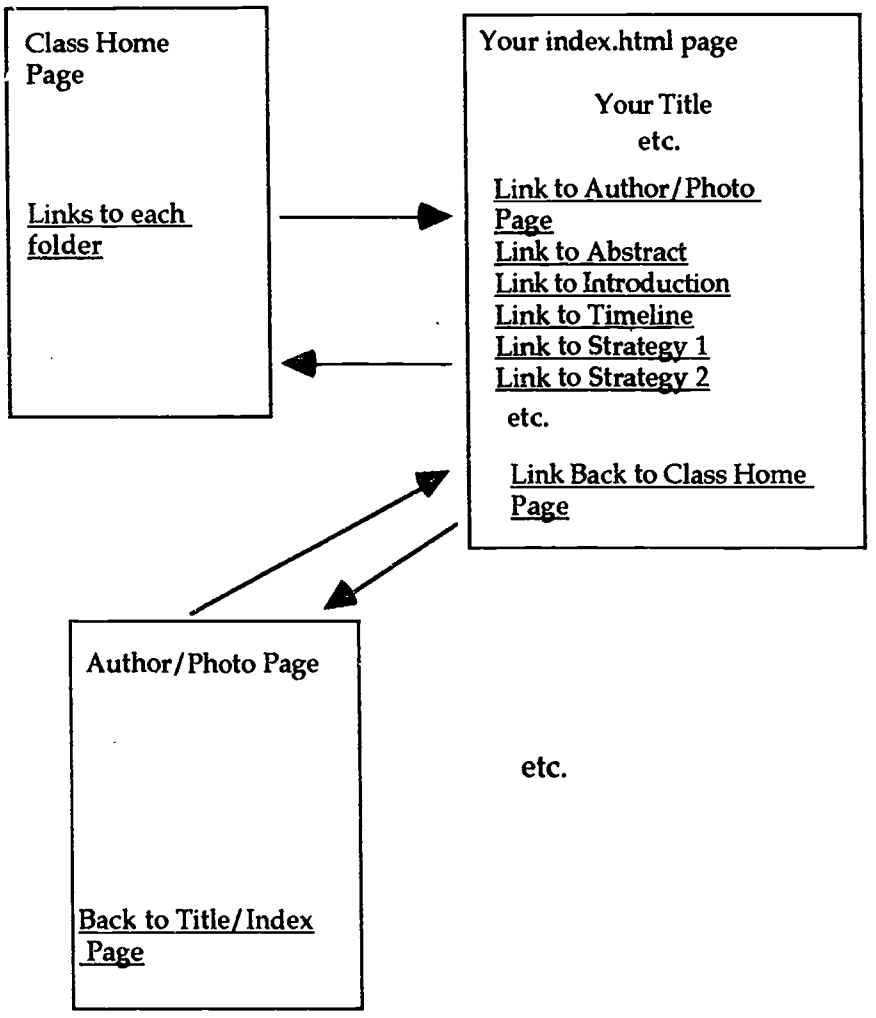
Literature Focus Units

Literature Focus Units	Literature Focus Units
Author: Beverly Cleary	Black Authors: Fictional History and Prose
The Folktale Cinderella: A Multicultural Perspective	Extraordinary Animals
James and the Giant Peach	Modern Realism
Multicultural Poetry	The Magic Schoolbus

**Web users click on the titles they want to browse.

For each group's unit, a folder was created within our class folder on our WWW Server [which is a computer that stores and connects information to the Internet and/or other computers]. Within their individual folders, each group created an index/title page which would serve as the main link to the rest of their unit, to be accessed through a link from our class title/home page. Each group set up WWW links within their unit, linking all the sections to their main index/title page. These links enabled access to each part of the unit, with return links back to the index page. Breaking up the units into sections enabled groups to make their units more readable on the WWW, and sectioning all of our documents opened up more options for developing a quality linking structure overall [See Figure 2]

FIGURE 2



Each unit was required to have author photographs scanned and inserted onto a page within the unit and to also have mail tags and navigation bars inserted onto the unit's index/title page. These mail tags and navigation bars were created beforehand by the "tech experts" and only needed to be copied and pasted onto each index page by the individual groups. The mail tags were designed so that educators or students browsing our units on the WWW could e-mail comments and suggestions back to us via our class mailing list. When a WWW user clicks on these Hyper Text Markup Language/HTML* links [which say "If you would like to make comments or suggestions about this project, click here"], a dialog box appears which is preaddressed to the class mailing lists and which contains space for user

feedback. The navigation bars only allowed return linking to our class home page.

The class mailing list was set up by our "tech experts" so that mail sent to our class list would be disseminated to the individual student e-mail addresses within the class. This mailing list was administered by one of the e-mail Servers on the WSU campus (which had list processing capabilities). We were linked, as many of the systems on the WSU campus are, to that Server through an ethernet connection. The mailing list enabled our class to communicate and receive mail which was relevant to the class as a whole and to communicate with other people on the Internet who wanted to send messages about our WWW material.

Browsing Our Work. Readers who would like to browse these materials can find them at the following URL locators:

http://www.educ.wsu.edu/306/ [for teaching ideas--theme cycles and literature focus units-- related to elementary school literacy lessons]

http://www.educ.wsu.edu/450/ [for units, content literacy strategies, and service learning ideas related to middle and secondary school curriculum].

Giving Us Feedback. Readers can provide feedback related to the various writing products of the preservice teachers. Readers can [1] e-mail their comments to the teacher of the courses [at **maring@mail.wsu.edu** ---- and he will forward coments to the authors and co-authoring teams]; [2] they can give us feedback using the "comments/suggestions" links; or [3] they can send their ideas directly to the students via their class e-mail lists [similar to electronic class newsletters which are received and read by all in the class]. The latter addresses are:

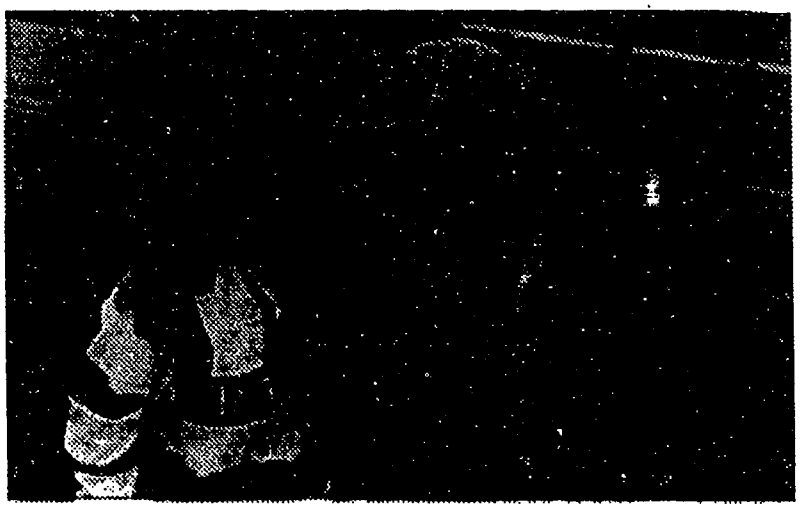
for elementary school literacy lessons-----
tandl306-l @listproc.wsu.edu
for middle and secondary school literacy lessons---
tandl450-1@listproc.wsu.edu or
tandl450-2@listproc.wsu.edu

In order to make all of this possible, we obviously needed many physcial resources. The software we used for making our WWW pages

included PageMill, BBedit Lite, Claris Works, Word for MacIntosh, Graphic Converter 2.2.2, Ofoto 2.0, and ScreenPlay. PageMill is an html editor that is a little more user-friendly for less-experienced WWW users. BBedit Lite is an editor that our tech experts used for more advanced editing of WWW pages in raw html. PageMill is what the majority of the students used for web-page development. Graphic Converter, Ofoto, and ScreenPlay were used for scanning pictures or taking video photos and converting them to GIF files that could be inserted and seen as pictures on our author/photo pages within our units. [See Figure 3]

FIGURE 3

Part of "Tech Expert" and Co-Author Dawn Hanson's author/photo page:



Meet Dawn Hanson [with WSU mascot Butch]:

Dawn is a Washington State University Senior majoring in Elementary Education with an Endorsement in Reading [k-12] and a Minor in Speech and Hearing. She is from Spokane, Washington.

Dawn is also on the WSU Rally Squad. She enjoys sports and being actively involved on campus in various student groups such as Fellowship of Christian Athletes, Baptist Student Ministries, Ambassadors for Diversity, Mujeres Unidas, American Sign Language Club, and MeCha.

Hardware utilized included several MacIntosh Power PC's, Quadra's, and Performa's; three scanners; a video camera; two and Power Mac 9500's, each with 32 Mbytes of RAM and 2 Gbytes hard-drive for our Department's Web servers. We also made use of the overall WSU computer network which students utilized for their e-mail accounts and services.

As is evident from the preceding overview, the task our three classes took upon themselves was substantial and led to much engagement! With the infrastructure previously built into our Education Department's computer lab and with the dedicated assistance of our "tech experts," the co-authors and team writers in our classes were able to accomplish the publishing of their writing on the WWW as well as communication with larger educational communities.

As the semester progressed, our "tech experts" developed several handouts of directions to help the other students with such tasks as making links, attaching e-mail tags, making photo pages, and dealing with unique or "mysterious" [who knows why!] problems and glitches. [See Appendices for handouts entitled "Directions for Putting Word-Processed Documents onto the World Wide Web," "Directions for Linking Your Web Pages," "If Your Documents Won't 'Save'----Directions for 'Save a Copy As'," "Directions for Attaching Mail Tags and Navigation Bars to Your Title/Index Page," and "Putting Author Photos on Your Home Page."]

Adapting Our Procedures to Other Classrooms: Step-by-Step Advice

By adapting our procedures to your classroom, you and your students can build yourselves into a community of learners which offers itself and its ideas to others world-wide.

STEP 1: SELECT AN EXPERIENCED TECHNOLOGY CONSULTANT AND RECRUIT STUDENT "TECH EXPERTS." Provide your consultant and a number of student "tech experts" with an overview and examples of the assignments you want your students to place on the WWW. Suggest that they read this article. If you teach in an elementary or middle school, you should probably seek out"tech experts" hailing from a neaby high school or college. Perhaps they can earn credit for a service learning project which involves helping you and your students.

Ask your technology consultant and your "tech experts" to create folders on a Server for your class and to design passwords so that your students can place drafts of their writing onto the Server. They can also advise you about further technical matters and choices related to your class website and the web building procedures and programs you will need to create it. Describe to them your plans and hopes so that they can give you

direction about what will and will not work on your System Server and about parameters for your students.

STEP 2: PROVIDE YOUR STUDENTS WITH MODELS OF WRITTEN WORK FROM PREVIOUS SEMESTERS AND EXAMPLES OF WWW APPLICATIONS THAT INVOLVE DIALOG AND INTERACTION AMONG WWW USERS. We feel it is important that students have the hope that the work they will put up on the WWW is interesting and significant to themselves and to others who read and respond to it. Our students were truly excited about "putting our work up on the WWW and getting feedback from teachers." We felt we were pioneers, in a sense. Soon, though, the newness of the WWW will no longer be. At that point, placing work on the WWW that is perceived by the students and their audiences as relevant, interesting, and significant will have to be a larger part of the motivation "of going to all this extra work."

As soon as your first semester's efforts are on the WWW, these, of course, will serve as effective motivators and examples to students who hope to follow "in the footsteps of last class." Furthermore, along with "hardcopy" assignments written by previous students, your current group of students will will be able to see the formats and styles your previous students have devised. In this way, students have the benefits of following a style guide and will be able to see that they, too, can be part of a learning community which offers its critical and ceative ideas to interested WWW users.

Instruct your writing teams to follow guidelines designed aimed at producing consistently structured formats. Explain that co-authors should be "reader friendly writers" who save their readers the frustrations of feeling they have just traversed so many idiosyncratic and stylistic labyrinths. Explain that members of the class will also feel a better sense of community with each other if their work, though unique in content, follows your common formatting and writing guidelines.

STEP 3: PERSONALIZE YOUR CLASS'S WWW EFFORT, EXPLAINING THAT THEIR IDEAS [WHICH STEM FROM THEIR MULTIFACETED "WHOLENESS"] ARE OF GREAT VALUE AND WORTH SHARING. We found that students' inclusion of author/photo and "wholeness biography" information helped motivate them to realize that their ideas actually stemmed from the constellation of their wholeness [e.g., their "history" as readers and writers as well as such factors as their life and

career goals, their intellectual interests, their personalities, their spiritualities, their physical/recreational/social avocations, their human/cultural views and experiences, their socio/political stances, concerns, and questions]. We feel that students--girls, boys, men, and women-- will soon be putting "just stuff" up on the WWW if their assignments do not encourage them to express, to use the terms of Balenky et al. (1986), their self(s), voices, and minds as these have emerged in the literate environment of their learning community.

STEP 4: DESIGN YOUR READING AND WRITING ASSIGNMENTS SO THAT YOUR STUDENTS CAN ENGAGE IN CO-AUTHORING. Collaborating in researching, reading about, and writing up projects has a trifold benefit: [1] students investigate more content and in greater detail than they can as individual researchers; [2] writing team members who are more computer literate help others take advantage this "zone of proximal development" (Vygotsky, 1978); [3] the community of learners in the class is enhanced because individuals learn from others and from the give and take of group work. However, scheduling adequate research time is important for this process to truly incorporate the whole reading and writing process.

STEP 5: USE AN "EDITOR" LIKE THE PAGEMILL PROGRAM WHICH ENABLES YOUR STUDENTS TO LAUNCH THEIR WRITING ON THE WWW. Pagemill is Macintosh program for creating Web pages. Allow time for your students to walk through the Pagemill tutorial in small groups of 2 or 3 [or through some other program you select for helping them translate their writing onto WWW] . They will demonstrate "basic competency" when they can cretae two pages of text with hyptertext links between them. Pagemill is an effective tool for students since it does not require them learn HTML/hypertext markup language.

You and your "tech experts" should explain to your students that students should first compose in a word processor like ClarisWorks, which can be translated into Pagemill. {We found that in our system that we could not use Word 5.1 with the version of Pagemill we were using.} We discovered that writing documents and parts of assignments in a word processor like Claris Works and transferring them into Pagemill worked best because it enabled us to spellcheck and to attend to page formatting, which was not supported under Pagemill. We also found that once document were transferred into html in the "editor," some aspects, such as fonts, were not

supported and that "underlining" was reserved for highlighted words that provided links to other web pages.

Assure your students that the transfer of the information will be simple for anyone familiar with "cut and paste" procedures.

STEP 6: EDIT YOUR WEB PAGES AND LINK THEM INTO A SINGLE, CENTRAL DOCUMENT THAT SERVES AS YOUR "HOMEPAGE." This step [securing links among (a) each of the sub-documents the students have created, (b) their title pages, and (c) a central entry point, the class homepage] is one the most technically sophisticated steps of the project. As each page is created in Pagemill, it is floating independent of any other page. The links are made by simple "drag-and-drop" method. The page icon from the top of the Pagemill page is clicked upon and dragged to the position on the connecting page where it is dropped. The link can now be labeled. For instance, linking the title page to the introduction page is a matter of dragging and dropping the icon from the introduction page onto the bottom of the title page. Label this link something like "To Introduction." This would now be the link taking the reader from the end of the title page to the introduction. Connecting each of the students' pages into a "homepage" follows the same procedures of dragging and dropping onto the homepage the various links to each of the individual student sites.

In our classes, to accommodate the volume of writing and to ensure consistent formatting, we chose to use tables to display our project title links on the class homepage. The table we created had columns, one for each category of assignments [see Figure 1]. Since Pagemill did not yet support the use of tables, we used straight hypertext language to define the tables, the links, and a program called BBedit. Your technological consultant may have to complete this procedure, because it may be beyond the abilities of your "tech experts." However, if you have the use of a page development program supporting the creation of tables, many "tech experts" will be able to accomplish the task.

STEP 7: CREATE A CLASS E-MAILING LIST. It is prerequisite for this step that students in your classes have and use e-mail. You and they can use e-mail addresses to communicate with any individual in the class. Then, in this step, you need to have your systems administrator create a class e-mailing list, which is like a electronic class newsletter that sends messages to you, your "tech experts," and your technology consultant as "owners" of the

list/newsletter and to your students as "subscribers." It may happen that your technology consultant will have the necessary software for creating your class e-mail lists.

After you have completed this step, you are ready to carry out the next step of developing e-mail return tags.

STEP 8: ADD E-MAIL RETURN TAGS AT LEAST TO YOUR CLASS'S HOME PAGE, OR BETTER, TO EACH PROJECT'S TITLE PAGE. This step is absolutely essential if you want to have your students write for genuine purposes and to real audiences and if you want to have interactive involvements with other WWW users who are interested in your work and writing. Former students can make suggestions and students not yet enrolled in your class can build their anticipation for taking it by browsing what youe former students have created.

Ask your "tech experts" [or your technology consultant, if they do not know how] to attach mail tags to your class home page and to the home pages of three or four groups of students who are "above average" in their computer literacy. Basically, your "tech experts" will use the BBedit or BBedit Lite editing program, which was used in Step 6, above. Your "tech experts" will type out the proper HTML programming commands [these can be a little confusing to beginning users!] and use cut and paste to place a mail tag "footer" on the "index.html" pages of the 4 groups of students. Once students in the four groups have mastered this procedure, they can teach it or do it for other students who are less computer literate. Before you consider this task completed, double check to see if the e-mail return tags actually work by looking at your index page on Netscape. Click on the words "If you would like to make comments or suggestions about this project, click here" to see if a dialog box appears that is preaddressed to your class e-mail list. Tell your "tech experts" or technology consultant to contact your system administrator [usually at the school district or university level] to open up your class e-mail lists to all subscribers. Once so open, you and your students will be able to receive feedback via the dialog boxes from all over the world. But if you forget this final part of Step 8, dialog about the writing completed in your classes will be limited to list owners and subscribers.

STEP 9: SHARE AND ARCHIVE FEEDBACK YOU RECEIVE OVER THE WWW. KEEP YOUR WWW PRODUCTIONS ON LINE FOR A YEAR OR MORE. You can expect to receive feedback after your class has ended. By

keeping this in an archive, former and future students can enjoy and profit from comments and suggestions. With each new semester, you will have new products and writing on the WWW. The quality of work and writing produced will improve with each passing semester, because you and your students will be able to stand on the shoulders, as it were, of learning community members from previous years.

Concluding Remarks

Before we decided to embark on the adventure of getting our work up on the WWW, our classes were designed to be embodiments of the learning community approach (Rousculp and Maring, 1992). However, the adventure of getting our work up on the WWW clearly animated us even more to function as a truly literate environment, which, in turn, transformed us even more into a community of learners.

Our decision to create format uniform, multifaceted writing for the web pages was facilitated by the fact that we used predeveloped guidelines and frameworks detailing both the format and content requirements of the reading and writing required in the classes. This structure encouraged co-learners in the classes to shine in the areas of creativity and freedom of thought while at the same time enabling individual students to contribute to the group effort.

Elementary and middle school teachers whose pupils write reports from theme cycles and literature focus units, secondary teachers whose pupils create reports within traditional and integrated content area units, and college-level instructors who invite preservice and inservice teachers to write similar projects from the perspective of lessson plans and units of instruction can model and adapt the procedures we developed and employed. After the projects are on the WWW, both students and teachers can look forward to receiving and responding to comments and suggestions from near and far. In short, the WWW, used this way, is not primarily a vehicle for the "transmission model" of education (Harste, 1977). Rather, it serves as a catalyst and tool for creating and sharing ideas, for improving literacy, and for welcoming many others into your classroom community of learners.

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Appendices

Note: These Appendices contain specific directions for preservice teachers at Washington State University. However, they can be adapted and rewritten into directions provided students elsewhere who have different assignments and a different website infrastructure. Teachers should share these appendices with their Systems Administrator, the Technololgy Consultant, and the "tech experts."

Appendix A

Kurt Myers
T&L 306/450

Directions for Putting Word-Processed Documents onto the World Wide Web

1. Go through the chooser directions to open the [College of Education] COE Web Server. Your web pages should be saved to your group's folder under our 450 or 306 class folder on that Server.

2. Open Claris Works (under the apple icon).

3. Under the File menu, drag down to "open."

4. When the open file window comes up, find your disk on the desktop and find the word processing file you wish to open in Claris Works. Open the file.

5. Claris Works can read several different types of files, but be sure to check if it can read the type of word processing program you are using before you type out too many things! If you are using Word 5.1 or 6.0, be sure to save the file as Word 5.0 or 4.0 (choices are found under the save-as file type box) so that Claris Works can read it.

6. If you are successful, your document will now be open in Claris Works. Save it as a Claris Works document if you want to, although this is not necessary. Under the edit menu, drag down to "select all." Then under the same menu, drag down to copy. This will copy the document to the clipboard.

7. Quit Claris Works and open the Page Mill document you wish to transfer the copied document to (from your folder on the COE Web Server). Start a new Page Mill document if desired. Make sure that the Page Mill document is in the edit mode by clicking on the globe in the upper right-hand corner, so

that the edit icon appears there. Place the cursor where you want the copied document on the clipboard to go. Under the edit menu, drag down to paste, and the document you copied from Claris Works to the clipboard should appear on your Page Mill document.

8. Do any additional word processing editing in Page Mill, and then save the document to your folder on the COE Web Server.

Appendix B

Kurt Myers
T&L 450/306

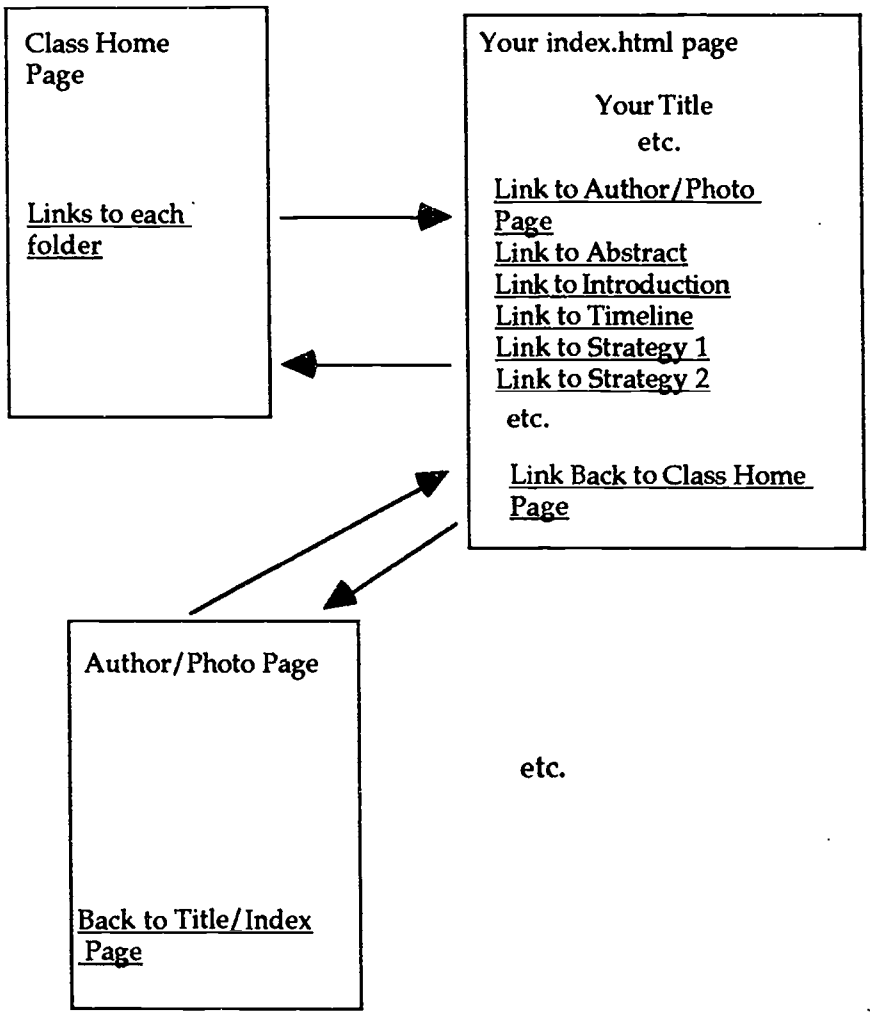
Directions for Linking Your Web Pages

Obviously, there are several ways students can link together web pages in our literacy development classes. This document just gives an example of one way to create links which I feel are easy to use.

To start, notice that we have an overall class page for our course. This page is set up to link to all of our small-group or individual folders which contain our individual strategies. Those links go to the index.html page within our folders, so **IT IS IMPERATIVE** that everyone's folder has an index.html page, which normally contains your Unit title, etc. From your index page, you should be able to link to each of the other pages within your unit (i.e. abstract.html page, strategy1.html page, etc.), and those other pages should link **back to your index.html page** so that there are no dead-end links within your folder (you could get back using the back button in Netscape, but "our way" is more user friendly and gives a better structure to your unit). You may also create sequential links between pages if you like (i.e. strategy1 links to strategy2 or back to the index page), but I chose not to do this to avoid confusion for our readers, since they do not really know the structure of our units without looking at the table of contents. I chose to make my index.html page a title page, with all of the links set up like an index/table of contents so that a reader can see how the pages fit together. The reader can link to a page, read it, and then link back to my index page to see what comes next and what other documents within the unit can be linked-to and read.

Also, your index page should contain a link back to our overall class home page. We have navigation bars and mail tags pre-made to insert into your index page (see our "mail tag directions and navigation bars" handout on how to do this) that will link you back to the class home page, but it is also helpful to create another readable link back to our class home page.

Below is a basic diagram of how your links should work. These ideas are only general guidelines, so just try to use the information, create user-friendly links, and be creative!



Our class home page may eventually be linked to the Education department home page. This is just for your information. Also, note that the address for our class homepage is http://www.educ.wsu.edu/450 (or /306 for the elementary education 306 class).

Appendix C

Kurt Myers
T&L 450/306

Directions for Save A Copy As...

Note: These directions deal with one of the most vexing problems we faced as we worked as a community of learners to put our work up on the WWW during the Spring 1996 semester. We hope to find a better solution to these problems soon.

As many of you may have noticed, sometimes when you are trying to save a document in Page Mill to your world wide web folder (on our COE Server) it does not work properly. You get a window that tells you that your file or folder is missing. This is caused by some sort of glitch in the Page Mill program or in the way our particular system is set up in. To get around this, do not use "Save As..." to save a copy to the desktop and then drag this into your folder, because this will "mess up" your links to other documents. Instead, use "Save A Copy As..." to save a copy of your Page Mill document into your folder.

To use "Save A Copy As... ," go under the file menu and choose "Save A Copy As..."
The Save window will pop up. Make sure you are saving this copy into your folder within our class folder on the COE Server. Under the Save current document as.. box you will see the original name of your document with _copy on the end of it (for example: abstract_copy.html). Save this to your folder, then go into your folder, put the old version of the document in the trash (i.e. abstract.html for our example), and then rename the copied version back to the original name to keep all of your links working properly (i.e., rename abstract_copy.html back to abstract.html). This is done by clicking once on the document to be renamed (in your folder) and then quickly dragging the mouse, which should highlight the document and put an edit box around it. Then you can click the cursor inside the box and delete the _copy part.
That's it!

Appendix D

Kurt Myers
T&L 450/306

Directions for Attaching Mail Tags and Navigation Bars to Your Small Group's Title/Index Page

Attaching a mail tag to your index.html (Title/Index) page allows people who are looking at your strategies on the world wide web to send email comments to you via our class mailing list, which is a kind of electronic class newsletter. The navigation bars allow people to get back to our class home page, so that they can browse other projects, definitions that pertain to what we mean by "community of learners," or other matters that are "links" on our class title page.

In order to put these items on your page, you must use an "editor" from our class folder called BBedit (or BBedit Lite). This editor allows you to make changes to your index page, in Page Mill, but the text is in "raw" html form. To make this process as easy as possible, we have already typed out the proper html text in a BBedit document in our class folder. The process just involves a cut and paste of text. The mail tag/nav bar document for section one of 450 is called section_one.html (in the class folder), and for section two of 450 it is called section_two.html. In T&L 306, it is called header_footer.html . To accomplish this task:

1. First open your section__[your title].html or header_footer. html document by double-clicking on BBedit, and opening that document from our class folder. If BBedit is being used by someone else, you may get a program-in-use message. If this happens, try to find out who in our lab is using BBedit, have them quit it, then both click and drag BBedit to the desktop to make a copy there. Then you should be able to double-click on the BBedit copy on your desktop and use it that way. Remember to put the BBedit copy on the desktop in the trash when you are done with it (**but do not "trash"the BBedit program in our class folder!**). If this does not work, just take turns using the BBedit program from our class folder.

2. Highlight the section from "Begin Header Here" to "End Header Here" within the section_[your title].html document or within the header_footer.html document for 306. Then make a copy of it to the clipboard using the "Edit" menu.

3. Open your index.html page in BBedit. You will see all of the "raw" html commands that Page Mill made for you when you designed that page. Click

the cursor on the top of the page, and then paste the Header text there from the clipboard.

4. Go back to the section_[your title].html or header_footer.html page in BBedit. Make a copy of the section from "Begin Footer Here" to "End Footer Here".

5. Go back to your index.html or header_footer.html page and place the cursor at the bottom of your document. Paste the footer there.

6. Now you have pasted the header and footer navigation bars and the mail tag on your index.html page. Look through the html commands and make sure that your document has a begin html (i.e. <html>) command at the top and an end html (i.e. </html>) command at the bottom. Get rid of any repeats of these commands (you only need one of each). Do the same for the <body> and </body> commands (you only need one of each of these also).

7. Also make sure that you only have one section of title commands at the top of your index.html page. For example, here is a shortened version of what you should have on your index.html page now:

```
<html>
<head>
   <title>Title</title>
</head>
<body>
      Header information here.

The stuff you did in Page Mill here.

         Footer information and mail tag here.

</body>
</html>
```

8. Finally, if you have color on your index page, you may encounter some problems here. Make sure you only have one line that has the words "bodycolor" in it. If you have any problems at all with this procedure, don't hesitate to ask a classmate, a "tech expert," or one of our "technology consults" [Marc or Nils] for help! We do realize that raw html commands can be a little confusing and threatening to the beginning user!

9. Close both documents in BBedit. Then, take a look at your index page using Netscape to make sure that this procedure worked properly.

Appendix E

Beau Wiseman
T&L 450/306

Putting Photographs on Your Homepage

The steps that follow pertain to photographs To Gif for use in WWW Pages [e.g., your "author/photo," other photos].

1. Open Ofoto program and place photograph in scanner attached to computer.

2. Choose Autoscan from the control panel that shows up on the Ofoto screen.

To crop the scanned image:

Use mouse pointer on the screen to choose the new corner of the picture. Then click and move the mouse to the opposite corner,and release. Now under Edit choose Crop and the picture will be cut on the dotted lines that were drawn.

3. Save the Image.

Under File choose Save. An options screen will be pulled up and it is important that the image is saved in the file or folder that it will be used in. It is now saved in Pict format.

4. Open Graphics Converter

In the left hand corner of the screen click on the apple icon and choose Internet Access. In this folder select Graphics Converter.

5. Open Image

Under File in Graphics Converter chose Open. An options screen will open and the file with the Pict image will need to be found and selected. Ckick OK and the Pict image will be opened.

6. Convert Pict to Gif

Under file choose "save as." This will bring up an options screen within this screen next to format, it will currently read Pict. Click and hold on pict and a list of options will be shown. Continuing to hold down on the mouse button, scroll upwards to

find Gif. Once Gif is highlighted, release the mouse button. Now, next to format, it should read Gif. Click on OK.

7. Install Gif image on a WWW Page

Now there should be a Gif image saved in the file. Open the desired WWW page and click into the place on the page where the picture is to be placed. Click and drag the Gif icon from the file to the page and drop it at the point it is to appear. This will place the image onto the page. Now save the page.

a. If this 7th step does not work, try the following as an alternative:

Use the insert image button on the toolbar at the top of your Pagemill document. Click the insert image button and a file window will appear. Find you Gif file in your folder. Highlight it by clicking once on it with the mouse. Then click open in the file window. Pagemill will automatically insert the Gif image you selected into your Pagemill document where the cursor was placed.