Web Site Creation as a Valuable Exercise: Seven Steps to Communicating Significance Online

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Technology classes in educational programs are abounding. Some are more theoretical, others more practical. Some take a technical perspective, others a rhetorical. Despite numerous differences in the make-up of these technology classes, many have one thing in common: the Web site assignment. Conveniently, this assignment can be sold as a "real world" application exercise with the goal of making it more attractive to the upper level students. Experience on the part of the author gained from teaching eleven communication technology classes in the past five semesters shows that most students are eager to learn how to make a Web site. However, unless the assignment is carefully crafted and directed by the instructor, the students gain little more than technical expertise at a very low level.

Good writing is more than putting words on paper, and a quality Web site requires more than colored text, a few graphics, and a few links. Quality education regarding Web site development calls for teaching students more than technical skills. Standards for Technological Literacy (ITEA, 2000) defines content of effective technology education that leads to technological literacy. This article explores the Web site assignment as a valuable exercise. By presenting a seven-step model, which forces students to think about their Web sites before actually creating them, the article directly addresses five of the twenty standards defined by the International Technology Education Association. Experience has proven that a combination of background information through lecture and the seven-step process leads to high quality Web sites that students are proud to show to potential employers. In the process, students develop an understanding of the characteristics, core concepts, and scope of Internet technology (Standards 1 and 2). Students also learn to draw connections between Internet technologies and other fields of interest (Standard 3). Finally, through the applied component of the exercise, students develop an understanding of attributes of Web design and are able to immediately apply this understanding (Standards 8 and 11).

The main problem with the Web site assignment is the time allowed for its completion. The Web site is usually not the only assignment in the class. However, in order to create even basic Web sites, a number of skills must be taught, such as a graphical interface Web site design program, or basic HTML code, navigation of the Web for information retrieval, and a file transfer protocol (FTP) program to upload the sites. If the instructor wants the sites to have more than a very basic level of sophistication, usually the fundamental techniques of scanning and a computer graphics software program application must be taught. Also, lectures of conceptual issues such as Web credibility, usability, audience targeted message design, visual rhetoric, and visual design need to be included in the instructional package. Finally, class time must be allocated for students to work on their Web sites. However, even this level of commitment does not always lead to "good" sites. Unfortunately, once uploaded, student sites are usually still identifiable as such.

The goal, then, is to turn the Web site assignment into a task that is enjoyable for the students and manageable for the instructor during the time allowed. As the end result of the assignment will be publicly available, students ought to be proud of their work rather than regarding it as "just another assignment completed." Ideally, students will learn not just how to create a Web site, but also understand how to direct the communicative power such a document can have.

The most successful strategy, according to personal experience, is
adapted from van Hoosier-Carey’s (1997) recommendations. Van Hoosier-Carey describes the Web site assignment as an exercise in the technical communication classroom. The key element to designing effective Web sites lies in good graphic design, which is often missing in Web sites that were created as class assignments. Many of the recommendations van Hoosier-Carey makes have evolved into effective solutions to problems resulting from “just another assignment” and “let’s just upload the site for now” attitudes.

One of the first problems is the seemingly different goal of instructor and students. These goals are not actually opposites, but may seem difficult to combine. Instructors want to teach students both technical and communicative or rhetorical skills. The Web site assignment seems a suitable tool since knowing how to create a Web site is heralded as the new “skill to have” for the job market for communication graduates. Students often are eager to learn how to make a Web site, but get frustrated easily by details. In order to save time, they often forego slightly more effective, visually more pleasing, and rhetorically more persuasive Web sites for those which, regarding communicative effectiveness, can be compared to the drawings of five-year olds.

A combined goal can be reached simply by structuring the assignment in a slightly different way. The following paragraphs will discuss each step in making the Web site assignment a valuable exercise: Step 1 – Lecture; Step 2 – Analysis exercise; Step 3 – Conceptualizing the Web site; Step 4 – Preparing the design; Step 5 – Analysis exercise; Step 6 – Designing the Web site; Step 7 – Presenting and redesigning the Web site.

Step 1 – Lecture

When grammar school children learn how to read, they are not presented with a copy of Homer and asked to “figure out” the rest for themselves. Instead, they learn the letters of the alphabet first. Similarly, students about to design a Web site must be taught the principles that make up a Web site, the conceptual issues. In two or three one-hour lectures, principles of Web credibility, usability, and visual rhetoric can be discussed with references to other topics such as intellectual property, graphic design, and audience-targeted message design. It helps to consistently show Web site examples that apply these principles to varying degrees so that students can learn how to spot both good and bad examples. As Spool (1997) points out, a Web site can look beautiful, yet fail to convey any meaning. By following the lecture, the students’ view is sharpened from the Web site as a whole to the components and the thought that went into the creation of a Web site.

Step 2 – Analysis Exercise

Directly following the days of lecture, students are given a homework assignment. The instructor provides each one with a Web site address and asks the students to analyze the Web site according to the principles discussed in class. These Web sites can be chosen arbitrarily, but some should be “good” and some should be “bad.” About four to six students should always be given the same Web site address. During the next class session, the class is divided into small groups depending on Web site reviewed. Students are asked to share their observations. Usually, 15 minutes are enough for this part of the exercise. The remaining class time is spent on showing each Web site to the whole class while the group that reviewed this site shares their criticism or praise of it. The purpose of this exercise is to practice the theoretical skills acquired through lecture, but also to give students possible examples and ideas of what they want their own Web sites to look like.

Step 3 – Conceptualizing the Web Site

At this point, students usually want to begin designing their Web sites by sitting down at computers and typing in HTML code or using a graphical user interface program. Instead, students must remain in their project groups and begin the conceptual process of designing a Web site. As December and Ginsburg (1995, pp. 130-132) point out, this consists of:

1. The rationale for the project – why it is needed, whether it adds information or services not available from existing sites.
2. The target audience(s) – who potential users are, what characteristics or interests they share.
3. The Web site’s purpose – what service(s) the site aims to provide for the audience, what level of information detail or complexity is appropriate to the audience.
4. The Web site’s objective – what output the Web site needs to provide for the audience in order to carry out its purpose.
5. The Web site’s subject domain – what information the development team needs in order to make informed choices about the site’s design and content.

If possible, students should be given a class session to talk about these issues. At this point, the instructor also should talk to each group and provide feedback. If no class time can be spared for this step and groups are required to meet outside the classroom, each group should make an appointment with the instructor for feedback purposes. Students tend to try to skip this step, but it is vital to understand these underlying conceptual issues, as otherwise the Web site will fail to communicate anything other than “this was a class assignment.”

Step 4 – Preparing the Design

Closely related and possibly intertwined with the conceptualization of the Web site is its preparation on
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Paper. Students should be required to prepare storyboards for their Web sites, drawing the connections and links between pages, and the graphical arrangement of text and image for each page. No great artistic skill is required, as the main purpose of this step is to understand the site's functionality, and not to present its beauty.

Step 5 – Analysis Exercise
Just as in the previous analysis exercise, the purpose is to detect strengths and weaknesses. The difference is that previously, arbitrary online sites were analyzed. This time, each group presents their results from Step Three and Four, defending their ideas before the class. Feedback and criticism from the class help to greatly improve the site since many times class members notice what team members have overlooked, as van Hoosier-Carey (1997) also points out. If either no class time can be spared for this step, or the class emphasizes a writing requirement, groups can be required to submit this defense in the form of a persuasive paper.

Step 6 – Designing the Web site
If this has not happened yet, students can be taught how to use the basics of a Web site development program in two or three class sessions. As they already have their designs in mind, the learning process is more rapid because students automatically apply the new skills to their individual needs. Students will require about two class sessions to put the Web site together. Most of the work has already been done on paper, so lengthy discussions on where to find link addresses or what images to include will not hinder the technical process.

Step 7 – Presenting and Redesigning the Web site
No Web site is ever perfect, and no good Web site is ever finished. Instead, Web sites should be thought of as projects in constant evolution. When the students have completed the Web site design step and have uploaded their sites, they deserve to present their work in class once again, this time with the seemingly finished project. However, many times little kinks need to be fixed, or ideas that worked conceptually cause problems in application. The presentation of the Web site should be thought of as the final rehearsal. Students should be encouraged to make repairs and minor changes before supplying the instructor with the URL of their site for grading.

Conclusion
The seven steps discussed present a simple but effective plan of turning the Web site assignment into a useful project. Experience has shown that adding a few simple requirements, such as the conceptualization stage and the paper design stage, do not require much time but result in higher quality Web sites. As teachers, we should be concerned with the messages we send out to the Internet. In technical writing courses, a sloppy memo with formatting errors would never be accepted. Uploading a Web site with poor navigation or no conceptual backbone is the online version of a sloppy memo.

The Web site assignment allows the unique opportunity to combine theory with application in a way that is satisfying both to the instructor and to the students. However, just as a Web site needs a purpose, the Web site assignment needs to have a purpose beyond simply being an “assignment.” Hopefully, the content and tips provided in this paper will help to develop and implement Web site assignments as valuable exercises, leaving far behind those Web sites that are there just to establish presence.

References and Recommended Readings


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