



Plan It. Design It. Build It. Put Your Web Site to Work

By David Warlick

Is your school or classroom Web site slacking on the job? Here, we detail strategies, tips, and how-tos for shaping up your online presence.

People today are going online to shop; get their news; communicate with family, friends, professional colleagues, and online communities; submit tax returns; find jobs; select and apply to colleges; meet their "matches;" and be entertained. We expect to find information online, we expect it to be up to date, and we expect it to be interactive. And the education environment is no exception. Parents and community are looking online to learn how their schools are preparing students for the future and how well they are succeeding. School and classroom Web sites are becoming the storefront for the business of education.

Craft a Web Publishing Strategy

As is the case with most professionals, educators fill up a typical work day attending to business—in this case, the business of education. They also plan curriculum; assemble educational materials; research, assess, and plan strategies; evaluate student learning; gain new skills; collaborate with other educators and experts; and deal with paper work. There is very little time to consider new tasks, and maintaining a useful Web site is certainly a new task. It is essential, then, that your Web presence yields a return that is worth the precious time you invest in it.

The bottom line? Any and all features of your Web site must be there because they help you do

your job in some way.

When deciding on the topics and issues to be addressed in your site, take a problem-solution approach.

Look first at your current job conditions, and then at the barriers that prevent you from succeeding to the degree that you want.

Teachers: Are too many of your students not doing their homework? Are they not gaining the desired outcomes from special projects? Do you need more materials for your classroom for daily activities? Administrators: Is your clerical staff spending too much time on the phone answering redundant questions? Is there too little collaboration among teachers in your school? These and many other problems can be addressed by a carefully crafted Web site.

Task 1: Establishing Goals

The first and most important component of your Web publishing strategy is to define your goals. Specifically, what do you want your Web site to accomplish for you? This is a fairly simple task, and perhaps easier for educators than for most, because they're already adept at formulating behavioral objectives.

To establish your goal(s), you need to ask and answer two key questions: Who will visit your Web site? How can your Web site visitors help you do your job?

Once you've identified what you need from your visitors, your goal is to promote-even provoke-those behaviors. If you are a teacher, you may want to improve the

instructional outcomes of your major classroom projects, and you may feel that involving parents more directly-perhaps in the brainstorming process, for example, or throughout the research stage-will help you accomplish this. As a principal, you may have a problem with student drop-off and pick-up. You might have an unusual parking area that was not designed for the number of cars it must accommodate each morning and afternoon. Improving this situation would decrease the disruption of tardy students in the morning and decrease the time that students remain on campus in the afternoon, which requires valuable supervision hours on the part of teachers.

Task 2: What Information Is Needed?

The next component of your Web publishing strategy is to identify the information that will cause your Web visitors to behave in a way that will help your school or classroom succeed.

For instance, consider the information that would motivate parents to want to become more involved in their children's projects. One key to productive involvement is for parents to understand the instructional objectives of the project in terms that have meaning for them. Here, clear communication is essential. Place yourself in the shoes of the parent. Craft a succinct, to-the-point description of the project that might substitute for the face-to-

face conversation you cannot have. It may also be helpful to include some Web links to resources that would be of specific use to them as helpers.

The principal we mentioned above may think first about detailing the problems that have been caused by disorganized drop-off and pick-up, but describing them in a positive way. This description might be followed up by a very simple but well-thought-out diagram of the student drop-off and pick-up area and short, numbered procedures for improving the situation. An additional consideration might be to anticipate that the diagram would be of greatest value in the car with the parent or caregiver.

So designing the page to be printed and including instructions

on its use may accomplish this.

Task 3: Getting Your Message Across

Building Web pages has forced us to gain a range of new skills, not the least of which is information design. Regardless of bandwidth, server speed, or Web editing technology, the most challenging part of communicating over the miles of wires that constitute the Internet is spanning the last 18 inches—the distance between the computer screen and the reader's understanding.

There are lots of tips for designing effective Web pages, and many will be shared here. But the most important guiding principle for all decisions regarding your Web strategy are your goals. If a design decision helps you accomplish your goal, then it is good Web design. Even if you are using flashing red text on a black background, if it helps you do your job, then it is effective design.

Keep in mind these additional tips to help you communicate through your site:

Use Images Deliberately. When considering whether or not to post those pictures of your school or classroom on your Web page, remember that images can effectively communicate ideas, feelings, beliefs, and facts very quickly. So the old adage applies: online, pictures really are worth a thousand words. On the other hand, downloading an image-rich page can be time consuming.

Decide if it's worth the wait.

White Space. One of the most common mistakes made by educators and even professional Web designers is to completely fill a Web page with text and other items. This can be overwhelming to the Web surfer, who will often choose to go someplace else instead. We need to avoid thinking of white space as a lack of content and think of it more as a design element. Surrounding an image or piece of text with white space will draw attention to it.

Byte-Size Text. Parents and others may also be discouraged from participating in a school project with their students if they are confronted with a classroom Web page chock full of text. It will be more inviting and easier to read—or perhaps more importantly appear to be easier to read—if information is dished out in short paragraphs with lots of white space between them. Indenting paragraphs, creating white space to the left of them, and decreasing the length of the lines will also make the page more "friendly" to visitors.

Design for Scanning. People do not come to the Internet for a leisurely read. They come to solve a problem, to answer a question, to learn. Most frequently they scan Web pages, so design your page for easy scanning. Identify

important terms or phrases in the text through bolding that text, coloring it red, or presenting it in a larger font.

It is also important not to center text. Centered text is more difficult to scan. All headings and subheadings should be flush to the left of the page or text section. Content between the headings should be indented with white space, which will make the headings easier to scan. For additional tips, see "[Design Scannable Pages](#)."

Menu Items. In 1956, an article in *Psychological Review* reported that people can only handle seven items of information at a time, plus or minus two. This rule serves Web designers well. If you want people to be able to remember menu items as they scan them, do not present too many.

At the same time, recent research has pointed to the even more important issue of breadth versus depth. The fewer the menu items, the deeper the Web site goes—the more people will have to click. People seem to prefer and more effectively use sites that offer a broader array of menu items with only two or three levels of depth.

These two seemingly conflicting points of view can be reconciled by having more than one menu on your page. Identify those options that are most important both in terms of your goals and the needs of your information customers, and use those items in the main menu. Then set up smaller, less

conspicuous menus in other parts of the page.

Take It from the Top. People usually need a reason to scroll down a Web page, and the first six inches of a page are your opportunity to convince the visitor that there is value in scrolling. In other words, the top of your page is perhaps the most important part for delivering a clear image of what your page or site is about and the content and services that are available there. This tip does not advocate having very short pages. Again, think of your goal and the way that your audience will use the page when determining the length of your pages.

Design Scannable Pages

What are the secrets for creating Web pages that visitors can take in at a glance? Here are seven tips to get you started.

Centering. Don't! Centered text is difficult to read smoothly.

Headings and Subheadings. Make headings and subheadings bold. Consider using a different font so that they stand out. Indent the content of separate sections so that headings and subheadings hang to the left. This makes them easier to scan.

Text Eye Magnets. Think about why someone might click the link to come to this page: what problems they are trying to solve and what questions they want to answer. Then identify text in your page that is related to those problems or questions, and make them bold, larger, or a different color. Somehow accent the text so that the scanning eye is drawn to it.

Image Eye Magnets. Images are another way to draw attention to specific parts of your page. Find an image or symbol related to what people might be searching for and insert it into your page. Images draw attention.

Bulleted Lists. When there are two or more items in a list, they should be bulleted. It is easier for the scanning eye to see the information as a list, and a bulleted list is easier to read.

Short Paragraphs. Shorter paragraphs are easier to scan. In addition, a page with many short paragraphs looks like less reading than a page with a few long paragraphs. Paragraphs should be about three sentences in size.

Choose the Best Format. If a graph conveys the information more effectively, then use a graph. If the message is best delivered with an image, then use an image. If text does the trick best, then use text.

QuickTime™ and a
TIFF (Uncompressed) decompressor
are needed to see this picture.

Task 4: Choosing Your Best Options

In the earliest days of Web publishing, educators had to learn HTML, or HyperText Markup Language. This consisted of codes, or tags, describing how information should be formatted, and how the pages were interlinked. Some educators still practice this wizardry, but most have moved to using sophisticated Web editing software that makes creating a Web page as simple as using a standard page-layout program, or even a word processor.

Combo Platter

Some Web producers find a combination of HTML and editing software works best. Laura Candler, a teacher in Cumberland County, N.C., went live with her site, [Candler's Kids](#) in 1999. Candler used Microsoft's FrontPage to put together her site, and continues to use this program- instead of one of the newer, simpler online services- to maintain and grow it because, she says, "It offers the freedom of being able to create the site exactly the way I want it and not according to a prescribed template." In addition, she taught herself enough HTML code to troubleshoot problems without the Web editor, when necessary.

Candler's Web work over the years has made her a technology-savvy educator, but for many others who may just be getting up to speed with technology, commercial template services that provide Web space and online tools for creating and maintaining sites can be a very

good solution. These template services use online databases to store page content that is submitted by the educator through a Web form. When a student or parent accesses the teacher's Web page, the content for that page is pulled from the database and plugged in to a standard Web page template, creating the finished page "on the fly," in about a second. Then the page is sent to the student or parent's browser.

These services are especially appealing to educators who want to deal strictly with content and not the nuts-and-bolts technology underneath. The teacher simply adds, edits, or deletes text through a Web form and hits the Submit button to update the page. With some of the services, teachers can even upload images and other types of files to become part of their own pages.

One of the most popular and simple template style services is TeacherWeb. Each page has a public version which displays a divider both above and beneath the content. When the teacher who owns the page clicks the divider above the content the edit version of the page appears. This version includes one or more Web form elements that let the teacher add or edit content. There is also a text box for the educator to enter the required private password. Clicking the divider beneath the content will load a tool for adding, deleting, renaming pages, and performing other functions.

Maria Cristina Castro de Mitma, a Spanish teacher at Colegio Franklin D. Roosevelt international school in Lima, Peru, maintains a traditional Web site on one of the school's servers. But she posts information that changes frequently—such as class projects and assignments—using [TeacherWeb](#) because it is less time-consuming than using a Web editor.

HTML

How well information is communicated is just as important as the information itself. Simple formatting can do a lot to help your message be understood and used. In addition to white space, small bytes and indenting, bold text can

draw attention, making it easier for readers to find certain pieces of information.

To accomplish this with an online template service, educators should know a little HTML. If you are writing a project description for parents, and you want to emphasize the instructional objectives, simply place "" in front of the text you want bold, and "" at the end of the text. Then display the page and view the effect. Most template services will accept simple HTML codes and format the text accordingly, and it takes almost no time to add them. For additional tips, see "[Four Must-Know HTML Codes](#)."

Tips for Choosing a Web Publishing Firm

- You may want to use a firm that can also provide hosting services so that you do not have to spend dollars and staff on maintaining a Web server and bandwidth.
- Use a company that has some experience with education. Business solutions do not necessarily work in education environments.
- Select a firm that is willing to be a part of your Web planning committee. This would give the company an opportunity to learn about your specific needs and suggest potential solutions.
- Make sure that the firm will be available and willing to continue adapting the system as conditions change.
- Make sure that there is a backup policy in place and that you receive copies of backups.
- Make sure that both the firm and your school district are in agreement on who owns the code for your Web site. If you own the code, then you have the option of changing hosting companies or even moving the system over to your own server. This will likely cost more money, though.

Customized Templates

Because he wanted to insure site content security and eliminate the advertising that is frequently a part of commercial template services, Doug

Johnson, Director of Media and Technology for [Mankato Area Public Schools](#) in Mankato, Minn., contracted with a local Web publishing firm to

create a customized template service to be used by teachers in his district.

The Mankato Schools determined that simplicity should be a key factor of their template, as they wanted educators to easily and often update Web information about classroom activities without spending an inordinate amount of time. The ensuing design features individual teacher Web pages with the school district's logo and essential links at the top, with tools for including a variety of personalized information and additional links below. Each site also has an administrative page where teachers can log in and receive Web forms or edit a version of their page to update the information.

If you are interested in having an Internet firm construct a Web publishing template service for you, there are several tips and suggestions to consider. (See "[Tips for Choosing a Web Publishing Firm.](#)")

Customizing as Student Enterprise

[The Beacon School](#) in New York City took an imaginative spin on hiring a professional firm to build a customized template. Technology coordinator Chris Leyman saw template production as a great opportunity to engage students in an enterprise-style activity while at the same time offering a locally designed Web publishing environment for teachers. At The Beacon School, which focuses on technology as well as humanities, each incoming freshman is required to take a technology class to learn, among other things, HTML Web coding. During this class, students who distinguish themselves with skill

in code writing are invited to join the Tech Team.

On the Tech Team, older students teach younger students the high art of HTML and PHP, a programming language that can be embedded within HTML to create highly interactive Web sites. During their four years on the team, students work with the teachers, their clients, to identify needs and plan Web-based solutions. Then they continue working with the teachers to implement and refine their classroom Web page tools. Many students take jobs after school and during the summer as PHP programmers.

Worth the Effort?

I recently had a conversation with Joan Troy, a math teacher at Cardinal Gibbons High School in Raleigh, N.C. At the time, she was using the template service HighWired (a pioneering application in the field). She told me about a student of hers, a bright boy but one who frequently did not complete his homework. Troy reported that once she began posting assignments on HighWired—a task that took only two minutes a day—the boy started turning in assignments every day. Other work also started improving in quality because he had the benefit of homework practice. Troy said that the improvement in performance of this one student was more than worth the time she spent establishing and maintaining her site.

The story of this student's revitalized efforts through Web technology is just one in hundreds, even thousands we regularly see and hear about as educators involved in the digital world.

Sure, we're also aware of the myriad barriers to this kind of progress: lack of time and training, concerns over safety and responsible behavior, and more. When all is said and done, however, there remains a central,

inexorable fact: the Internet is a doorway between our classrooms and our communities. It is up to us to either open that door or leave it locked.

Web Building Tools

Here's a sampling of tools to get you started on building your school's Web site.

WYSIWYG EDITORS

These editors operate more like a word processor. As you enter and format text, insert images, and move items around, what you see is what you get (WYSIWYG).

- [Adobe GoLive](http://www.adobe.com/golive) -- <http://www.adobe.com/golive>
- [Macromedia Dreamweaver](http://www.macromedia.com/dreamweaver) -- <http://www.macromedia.com/dreamweaver>
- [Microsoft FrontPage](http://www.microsoft.com/frontpage) -- <http://www.microsoft.com/frontpage>

HTML EDITORS

These are text editors with features that assist Web designers in writing HTML code. These are not for beginners.

- [BBEdit](http://www.barebones.com/products/bbedit.html) -- <http://www.barebones.com/products/bbedit.html>
- [EditPlus](http://www.editplus.com/) -- <http://www.editplus.com/>
- [Macromedia HomeSite](http://www.macromedia.com/software/homesite) -- <http://www.macromedia.com/software/homesite>

IMAGE EDITORS

Pictures are worth thousands of words, and good pictures are worth more. Learning to make good use of an image editor requires a fairly steep learning curve, but the climb is worth it.

- [Adobe Photoshop 7](http://www.adobe.com/photoshop) -- <http://www.adobe.com/photoshop>
- [Adobe Photoshop Elements 2](http://www.adobe.com/products/photoshopel) -- <http://www.adobe.com/products/photoshopel>
- [Jasc Paint Shop Pro](http://www.jasc.com/products/psp) -- <http://www.jasc.com/products/psp>
- [Macromedia Fireworks](http://www.macromedia.com/fireworks) -- <http://www.macromedia.com/fireworks>
- [Ulead PhotoImpact 7](http://www.ulead.com/pi) -- <http://www.ulead.com/pi>

ANIMATION

Adding animation to your Web page can be fun, but it can also be distracting to Web visitors. Include animation in your Web site only if it contributes to the message you are trying to convey.

- [Adobe LiveMotion 2](http://www.adobe.com/livemotion) -- <http://www.adobe.com/livemotion>
- [Animation Shop](http://www.jasc.com/product.asp?pf%5Fid=003) -- <http://www.jasc.com/product.asp?pf%5Fid=003>
- [GifBuilder](http://homepage.mac.com/piguet/gif.html) -- <http://homepage.mac.com/piguet/gif.html>

- [Macromedia Flash](http://www.macromedia.com/flash) --http://www.macromedia.com/flash
- [Ulead GIF Animator 5](http://www.ulead.com/ga) --http://www.ulead.com/ga