Abstract: Web sites are important for schools to support teachers, administrators, counselors, students, parents, and the community. Redesigning a school's web site can become a complex process and requires careful planning. Studies with web users (Yale Style Guide, Nielsen, Siegel) have produced work that informs school web site reviewers of ways to make a site more usable and enjoyable. The US government and the W3C consortium have accessibility guidelines for web sites to assist site reviewers in adapting their site so users of all abilities have equitable access. A school must reconcile time and budget limitations with the need to serve a diverse audience. This paper offers guidelines and tools for streamlining the process of web site review and redesign. Recommendations address the web site redesign team and their roles, supporting the process, identifying the site's purposes, user surveys, content audits, task lists, storyboards, color palettes, style guide, usability and accessibility.

Web sites are becoming increasingly important for schools as support for teachers, administrators, counselors, students, parents, and the community. According to the Webb66 online school web site directory, over 13,000 of the nation’s 108,000 schools have web sites. Jamie Mackenzie (1997) offers four reasons for maintaining effective school web sites. Reasons include introducing visitors to the school, pointing students to useful web resources, publishing student work, and collecting data on curriculum projects. Developing or redeveloping a school’s web site can become a complex process and it requires careful planning. Judi Harris (1997) suggests exploring who will use the site, what information users will require or appreciate, and maximally useful ways to present the information. Years of study with web users (Yale Style Guide, Nielsen, Siegel) have produced an extensive body of work that informs school web site reviewers of ways to make a site more usable and enjoyable. The US government and the W3C consortium recently released accessibility guidelines for web sites that will assist school web site reviewers in adapting their site so users of all abilities have equitable access. School web site review and redesign may be a limited, target process for making basic improvements and updates, or it may be an ambitious complete overhaul. Extensive web redesign projects can be facilitated using summer writing teams, grants, and class projects done by high school or college web design students.

The following tools are presented sequentially as guidelines to assist in the school web site redesign process. Schools have unique needs, capabilities, and characters, and each school’s uniqueness is reflected in its web site, as it is in the redesign process. Schools have widely varying resources to commit to web site redesign. Therefore the tools presented here should be considered a menu of options, any of which can be used to streamline the process.

1. Site redesign team

1.1 Menu of site revision team members

<table>
<thead>
<tr>
<th>Role</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>School/district tech coordinators</td>
<td>Technical aspects of changing and adding files, server support for interactive elements, permissions, presence of tech support pages</td>
</tr>
<tr>
<td>Graphic artists/designers</td>
<td>New logo or navigation elements, layout of pages</td>
</tr>
<tr>
<td>Teachers</td>
<td>Design of class pages, curriculum pages, teacher info pages</td>
</tr>
<tr>
<td>Students of various levels</td>
<td>Interest in look and feel of site, success I navigating site</td>
</tr>
<tr>
<td>Parents</td>
<td>Rating usefulness</td>
</tr>
<tr>
<td>Club/sport sponsors</td>
<td>Design of club, team and group areas</td>
</tr>
</tbody>
</table>
1.2 Support needed by revision team:
Support includes: time and place to meet together and with groups for focus discussion and testing, flexibility in releasing students and staff to assist, access to networked computers, method of making changes on test server, budget for new software, cameras, and paper.

2. Site purposes

2.1 Identify purposes of our school web site: decide who uses the site and why, then design for them.
Purposes may include: recognizing student achievement, posting collaborative student projects, organizing curriculum resources for teachers and students, organizing information for staff, introducing visitors to the school, introducing prospective students to the school, providing information to parents, providing information to businesses and families new to the area.

2.2 Survey users about their needs and preferences:
Ask “What do you like most about using the web?” and “What do you like least?” Use a questionnaire to gauge the importance of different web features, or to judge the current school site. Consider: What’s good and what’s not working about the current site? Who are typical users and their age, ability, and technology? What actions do users take at the site? How should users perceive the site: fun, friendly, professional? How can the school show its uniqueness? What sites do users like and why? What current content will be kept? How will the content be structured (information design)? What would be the first 3 things you would change about the site? What aspects of the current look do you want to keep? (Goto & Cotler, 2002)

Design principles relate to the visual elements, layout, and navigation. The following general principles lead to a more user-centered site (ED’s Oasis, 2002). Pages are clearly titled. Graphics and art are functional/relevant. Icons clearly represent what is intended. Alternate navigation methods are present. The online resource accommodates multiple modalities and learning styles. Extensive scrolling is not required. Advertising is absent, minimal or is useful if present. A link back to the home page is provided. Text and colors are legible. There is a site map available for easy navigation. The site employs consistent design elements throughout. Pages are free from logical and language errors. There are useful headings and subheadings on the page.

Usability standards increase a site’s readability, ease of use, and user satisfaction. Most sites and their users benefit from adhering to these standards. The site is easy to navigate. Information is available in more than one format. The pages load quickly. Text is easy to read, and simply written. Site organization is logical. Links are current and descriptive. Links to additional resources provide related information or examples and support learning objectives. Pages are free from frames requiring scrolling. The page does not require special plug-ins or programs to run. The site limits elements that might create accessibility issues (sound without text, graphics, buttons screen reader can’t read) (ED’s Oasis, 2002).

The educational value of a school website is judged in terms of appropriate content for its purpose and audience. The purpose of the site is evident and appropriate. The author/sponsor of the site is indicated. The author/sponsor of the site has adequate authority/credentials. The author/sponsor can be contacted. Information is educational, objective and true with limited bias. Is there a date that tells you when the page was made? Links to more information are provided. The site clearly guides users as what they can do there and how. Student communications and contributions are screened before being posted to the site. The arguments are supported and the sources of information are documented.
Give all users opportunities for input by asking questions such as: What information is present in the site that is not needed? How should information be grouped or organized better? What information is missing from the site that would be useful to users? What other suggestions do you have for improving the site?

3. Web Site Redesign Profile

Create a redesign profile for the web site to guide the redesign work. Include the site goals, the needs and preferences of the audience, the main redesign issues and goals, the tone desired for the site, the technical and time scope possible for the redesign, the long term site maintenance plan, and the abilities of the project team (Goto & Cotler, 2002).

4. Learn about other school web sites

Use a web search to study the web sites of other schools similar to yours. Choose a few sites for users to rate in comparison to yours: What do these do better or worse than ours? What is easier and harder at these sites?

Audit of existing site content (Goto & Cotler, 2002)

<table>
<thead>
<tr>
<th>Section: Home page index.htm</th>
<th>Item</th>
<th>Description</th>
<th>Importance (1=low, 5=high)</th>
<th>Action (+ to keep, -- to delete)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intro text</td>
<td>2-3 lines of school overview</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal message</td>
<td>1 paragraph of welcome</td>
<td>5</td>
<td>Incorporate into overview or move to principal page</td>
<td></td>
</tr>
<tr>
<td>Mascot logo</td>
<td>Black line drawing of school symbol</td>
<td>2</td>
<td>Improve quality</td>
<td></td>
</tr>
<tr>
<td>Navigation buttons</td>
<td>Graphical links to grades, reading, sports, calendar</td>
<td>1</td>
<td>Revise to reflect new theme and content</td>
<td></td>
</tr>
<tr>
<td>Contact</td>
<td>3 lines of address, phone and email</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Animated message</td>
<td>GIF animation of seasonal image</td>
<td>5</td>
<td>Increases maintenance and load time</td>
<td></td>
</tr>
</tbody>
</table>

5. Task list

Develop a task list, showing priority items, responsible people, deadlines, and completion. Items to include: poll users about needs and preferences, periodically report changes to users, demo at staff meeting or Open House, add screen capture to newsletter, update images and logos, add interactivity or a feedback form, add common school forms, create form for teachers to add class news and assignments and sport scores, add student gallery, update links to curriculum resources, add VR/panorama of new media center and nature center, test new features, or add PTA newsletters.

6. Site planning

6.1 Site map

Create a site map using diagramming software or graphics software such as Inspiration, Visio, or Freehand. Plot out the pages and links. Ask for feedback, additions.

6.2 Compare color palettes

Crayon colors

School colors

Ocean colors
6.3 Storyboard possible page designs

7. Style guide

Develop specifications for common aspects of pages.
- Colors for titles, text links, backgrounds, borders
- Text: use of formatting such as bold, quotations, heading sizes, fonts
- Images: file formats, padding, school and district guidelines for students and student work
- Content: copyrights, permissions, requirements and prohibitions

References


