

DEPARTMENT OF DEFENSE EDUCATION ACTIVITY

DoDEA Web Publishing Guidelines

DoDEA Web Publishing Guidelines
Office of Communications
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dodea

DEPARTMENT OF DEFENSE EDUCATION ACTIVITY

JULY 2001

Technical Standards

Publicly Available Web Sites (Internet)

Accessibility. To accommodate customers with disabilities or others using text-based Web browsers, Web pages must incorporate the following:

*Guides, checklists, and techniques are available from the Worldwide Web Consortium (W3C) **

1. Provide descriptive alternative text tags for all navigational graphics and any graphic that adds value to the customer's experience. Do not put text descriptions in alternative text tags for "spacer" graphics. If placing several graphics together on a Web page with no space between them, use a separator in the alternative text tag description, such as the pipe sign "|" so the text does not blend together confusing the customer. When a graphical hyperlink and an identical text hyperlink appear together, use a space, " ", as the alternative text tag description.

Example: hyperlink: alt="Link to Employment Opportunities"

graphic: alt="Picture of a group of children studying"

list item bullet: alt=" "*

navigational graphic: alt="Link to Search| "

graphic and hyperlink together or a graphic used as a spacer: alt=" "

2. Provide descriptive alternative text tags for all areas of client-side image maps or offer alternative text hyperlinks on the Web page. Server-side image maps are not acceptable for use in Web pages.
3. Provide descriptions for text-based graphics, applets, or scripts if they are not fully described through alternative text tags or in the document's content.

Applet: "A small program, usually embedded in a Web page, to perform a simple function."

4. Provide equivalent alternatives for all multimedia information. Alternatives should be synchronized with the presentation.

* (see the Web Authors Resources section)

5. Ensure that text and graphics are perceivable and understandable when viewed without color.

*Examples of what **not** to do: (1) A web page has three arrows: one red, one blue, and one green. A link on the web page tells the customer to click the "red arrow." (2) Place maroon colored text on a black background.*

6. Ensure that Web pages are perceivable and understandable when viewed without an associated style sheet (e.g., Cascading Style Sheet).
7. Ensure that moving, blinking, scrolling, or auto-updating objects or Web pages can be paused or frozen. An animated graphics must stop after no more than five (5) animated sequences. Objects on a Web page must not cause the screen to flicker.
8. Activation of hyperlinks must be available through both a pointing device (e.g., mouse) and the keyboard (e.g., Tab key).
9. Changes in the natural language of the Web page (e.g., from English to French) must be clearly identified.
10. Provide table column and row headings when tables contain tabular data. Include code to associate data cells and header cells when tables have two or more logical levels of rows or columns.

Example: `<TABLE border="1"
summary="This table charts the number of cups
of coffee consumed by each teacher, the type
of coffee (decaf or regular), and whether
taken with sugar.">
<CAPTION>Cups of coffee consumed by each teacher</CAPTION>
<TR>
<TH id="t1">Name</TH>
<TH id="t2">Cups</TH>
<TH id="t3" abbr="Type">Type of Coffee</TH>
<TH id="t4">Sugar?</TH>
</TR>
<TR>
<TD headers="t1">J. Smith</TD>
<TD headers="t2">2</TD>
<TD headers="t3">Regular</TD>
<TD headers="t4">No</TD>
</TR>
<TR>
<TD headers="t1">S. Doe</TD>
<TD headers="t2">5</TD>
<TD headers="t3">Decaf</TD>
<TD headers="t4">Yes</TD>
</TABLE>`

11. Ensure that Web pages do not require a set time limit for a response.
12. Ensure that Web pages which require the customer to have an applet, plug-in, or other application on their system contain a hyperlink to the

applet, plug-in, or application, and that the applet, plug-in, or application meets specifications of Section 508.

Plug-in: "A third-party program, tied into a Web browser, that is used to access a specific type of Web content."

13. Web pages making use of "Frames" to separate a Web page into smaller windows, must be named with text that identifies the frames and facilitates navigation.
14. When using a standard navigation scheme, a method must be used to allow the customer to skip the navigational links and jump to the main focus of the Web page.

Example: Create a one (1) pixel by one (1) pixel transparent graphic named, "skipnav.gif," for example and insert the following code into the Web page before the navigation menu:

```
<A HREF="#content"></a>
```

At the beginning of the Web page's primary content insert the following code:

```
<A NAME="content"></A>
```

15. When there is no way to make the Web page compliant, a text-only Web page with equivalent content and functionality must be added and updated whenever the Web page or included content changes.
16. Test Web pages with a non-graphical browser such as Lynx*, speech synthesis software such as JAWS, or an on-line accessibility Web site, such as "Bobby" *.

Copyright / Trademark Material. Copyrighted information or trademarked material cannot be used without the written permission of the copyright or trademark owner. All non-Federal government information, to include student works, should be considered copyrighted until proved otherwise. While most Federal government information is not copyrighted or trademarked, information from some Federal government agencies such as the National Aeronautics and Space Administration (NASA) may be copyrighted or trademarked, and written permission must be obtained before it can be used. A statement must appear near the copyrighted information stating it is used with permission.

Duplication. Do not publish duplicate DoDEA content unless the duplication is for performance, security, or other mission-related reasons. If relevant, provide a hyperlink to the Web page. Permission for duplication must be obtained from the owner of the content and the DoDEA Webmaster.

* (see the Web Authors Resources section)

Hyperlinks. When connecting to other Web pages or another Web site, the following must be incorporated:

1. Reference information from other sources on the Internet. Do not copy the content.
2. Hyperlinks to large documents or graphics must specify the file size in parenthesis at the end of the hyperlink.
3. Hyperlink text should be brief but descriptive, not just "Click Here."
4. Hyperlinks to Web pages, or within Web pages contained in the Web site, should use relative addressing. When the use of absolute addressing is required to link to another Web site, the address must use the Web site's fully qualified domain name and not an Internet Protocol address.

*Example: Relative Address: *

*Absolute Address: *

*And Not *

Fully Qualified Domain Name: "The combination of the Internet protocol (e.g., http://), server name, (e.g., www), domain name (e.g., odedodea.edu), and if applicable, port number (e.g., :80) and file name (e.g., index.html) as in 'http://www.odedodea.edu:80/index.html'."

5. Periodically review hyperlink connections to ensure continued suitability and availability.
6. Hyperlinks to non-DoD Web sites must support the Component's (e.g., Headquarters, Area, District, School) mission. If the content of a hyperlinked external site becomes questionable, objectionable, or unavailable, remove the hyperlink.
7. Only hyperlinked text must be used to direct visitors to private organization or individual Web sites. Do not include graphics or logos depicting companies/products.
8. A hyperlink to the DoDEA Privacy and Security Notice must be included at the Web site's homepage, main entry points, and on any Web page that includes hyperlinks to private organizations or individuals.
9. If the Web page includes a hyperlink to a private organization or individual Web site, hyperlinks to all similar Web sites must be provided in the Web page, if requested.
10. Hyperlinks to non-DoDEA web pages must include a notification letting the customer know they are leaving a DoDEA web site.

Example: External Site: U.S. Department of Justice Web Site

11. Hyperlinks to file types that require a separate browser plug-in or helper application (e.g., Adobe Acrobat (.pdf)) must include a text-only hyperlink to the location of the plug-in or helper application, along with a statement that DoDEA does not endorse or support the product.

Example: Link to Adobe Acrobat Reader

Link to Adobe Accessibility Tools for Adobe PDF Documents<p>

DoDEA does not support or endorse Adobe Systems Incorporated or its products.<p>

12. No compensation of any kind can be accepted for placing a hyperlink on a Web site.

Non-copyrighted Material. Non-copyrighted material, text, clip art, hyperlinks, images, and sound or video clips may be used **only** if they directly relate to the Component's mission.

Privacy.

1. Visitors to a Web site can not be required to enter personal information.
2. Any Web site that collects personal information must enable a method of secure data transfer such as Secure Socket Layer (SSL), and must implement Public Key Infrastructure (PKI) according to DoD guidance. The collection of information via a Web site is considered a system of records and thus must comply with any applicable Federal government and/or DoD guidance (e.g., Privacy Act).

Registration. Web sites must be registered in the Government Information Locator Service (GILS)*.

Security. Examine and verify Web pages for sensitivity and distribution/release controls, including sensitivity of information in the aggregate/disaggregate, prior to being posted on a publicly available Web site. **Web pages may not contain any of the following:**

1. First, middle, or last name of any person, with the exception of first and second tier Component Heads (e.g., Superintendent, Principal, Assistant Principal).
2. The physical location, description, or depiction (e.g., a floor plan, a school map) of a Component overseas. Use only official APO/FPO mailing addresses.

* (see the Web Authors Resources section)

3. Any telephone number other than the Component's official telephone or facsimile number, or a telephone number for a DoDEA employee's position, generally known to the public (e.g., "Principal," "Athletic Director").
4. The names of DoDEA employees, students, or parents other than the first or second tier Component Heads.
5. An electronic mail address that matches a current logon or account name of a DoDEA employee. If this condition exists, an electronic mail address alias (e.g., "webmaster@hq.odedodea.mil") should be created and used.
6. Analysis and recommendations concerning lessons learned which would reveal sensitive military operations, exercises, or vulnerabilities.
7. Reference unclassified information that would reveal sensitive movements of military assets or the location of units, installations, or personnel where uncertainty regarding location is an element of a military plan or program.
8. Information, the release of which would be a clearly unwarranted invasion of personal privacy. This includes the following categories concerning U.S. citizens, DoDEA or DoD employees, and military personnel: (1) Social Security Account Numbers; (2) dates of birth; (3) home addresses; (4) telephone numbers other than duty office numbers; (5) personal electronic mail addresses; and (6) names, locations, and identifying information about family members of U.S. citizens, DoDEA or DoD employees, or military personnel.
9. Proprietary information submitted by a contractor and protected by a Limited Rights Statement or other agreement, and trade secrets, commercial and financial information submitted by an entity outside the government which considers the information to be protected from release to the public.
10. Test and evaluation information that could result in an unfair advantage or disadvantage to the manufacturer or producer.
11. Technical information not marked or otherwise determined to be appropriate for distribution.
12. Unclassified information pertaining to classified programs. The review of unclassified information pertaining to classified programs proposed for posting to a publicly available Web site must take into account the likelihood of classification by compilation.
13. Product endorsements or preferential treatment of any private organization or individual.
14. Embedded or in-line graphic or programmatic code provided by, or hyperlinked to, private organizations or individuals for the purpose of

providing services (e.g., Web page counters, local weather reports, or Web site traffic analysis).

Student Works. Before student works may be published on a Web site, permission must be obtained from the individual or, in the case of minors, parent/guardian. A statement must also appear on the Web page displaying the student's work stating that the work is the intellectual property of the student and that individuals interested in using the work should contact the Component Head to arrange permission.

Sample Statement: The student work of art appearing on this Web site is protected by the copyright laws of the United States. Downloading, reproduction or distribution of the work of art appearing on this Web site is specifically prohibited without the written approval of the individual who created the work. Persons wishing to obtain artist permission to reproduce the work may request such permission by writing the artist care of the school principal.

[Note: This requirement may be met by the parent/guardian signature on the recommended waiver form or by any facsimile that includes specific reference to posting student's work on the Web site.]

Web Page Approval. Before publishing, Web pages must be reviewed and approved by the Component Head or designee(s). Web pages not in accordance with, or outside the scope of, this document must also be reviewed by the DoDEA Webmaster and approved by the Chief, Office of Communications, and the Director, DoDEA, or their designee(s) before publishing.

Web Page Composition. Web pages must be developed and published to support the following:

1. Prevent directory browsing. The Web site's main directory and all subdirectories contained within must have a page named according to the Web server's default homepage setting (e.g., index.html, home.htm, etc.).
2. Must not contain questionable or objectionable content; material that is sexually explicit, gambling, or hate-speech related; or material that promotes illegal or unethical activity.
3. Design Considerations:
 - The Web site design must have a width of no greater than 750 pixels and use a maximum of 16-bit color or "High Color."
 - Whenever possible, limit Web pages to one screen in width, four screens in length, or provide a target tag to various sections of the document, including a return link at the bottom of the Web page to return to the top of the Web page.

- The Heading section must contain a Title section with a descriptive title starting with "DoDEA: ."

Example:

```
<HTML>
<HEAD>
<TITLE>DoDEA: Bitburg Elementary School –
Homepage</TITLE>
</HEAD>
<BODY> ....
```

- The Web site's homepage must contain hyperlinks to the DoDEA's Web site homepage and the DoDEA Privacy and Security Notice.

- The date of Web page creation, or last update, must appear in small text at the bottom left corner of the Web page.

Example:

```
<Left>H6>4/30/2001/</h6></Left><br>
```

- The first initial and last name of the Web Author, the person who designed or obtained any graphic, and the approval authority must be placed in META tags in the Heading section of the Web page.

Example:

```
<HTML>
<HEAD>
<META name="author" content="T. Smith">
<META name="designer" content="A. Thomas">
<META name="approved" content="K. Mann">
.....
```

- Use colors that promote a high contrast between the text and background colors.
- A standard navigation scheme should be maintained throughout each Web site.
- Major areas of each Web site should be consistent in design and presentation. Whenever possible, limit the number of font styles, sizes, and colors used in the Web page.
- White (#FFFFFF) text colors should be avoided for Web pages. Not all printers print background colors.
- Only school, educational, or instructional graphics are permitted.
- Reduce the file size of the Web page including graphical content where possible to decrease Web page download time.

4. The Web pages must conform to recommended Extensible Hypertext Markup Language (XHTML) / Hypertext Markup Language (HTML) standard, as documented in the specifications of the World Wide Web Consortium (W3C) * and must be supported by the most current and the last previous version of major browser software (e.g., Netscape Navigator, Microsoft Internet Explorer).
5. Only non-proprietary, platform independent program scripts (e.g., Java, JavaScript, Perl) may be used, as long as the functionality is available in the most current and the last previous version of major browser software. Web pages must not require the use of any specific browser.
6. The use of "persistent cookies" or other methods to collect or store information is not permitted. The use of "session cookies" is allowed with permission of the DoDEA Webmaster. *[Note: A "cookie" is a small piece of information sent by a Web server and stored on a customer's system so it can later be read back from that system. A "persistent cookie" is one that remains over time. A "session cookie" is one that remains only for the current browsing session and must be deleted at the end of the session.]*
7. Outdated Web pages must be updated, and superseded Web pages and associated files removed.
8. Web page and file names must not use characters other than letters, numbers, or an underscore "_" in their filename and have 3 or 4 character extensions
9. The use of frames to link to external sites is not permitted. The use of frames to link to Web pages from DoDEA Web sites is permitted.
10. No sponsorship, advertisement, logo, endorsement, or preferential treatment of any private organization or individual may be included in Web pages or "pop-up" when viewing Web pages.
11. Requests for information or surveys of the general public must conform to DoD and Federal Government (e.g., Office of Management and Budget) policy. Forms for general solicitations of comments that do not seek responses to standard questions, such as the common opinion-based feedback forms and e-mail links, are allowed.
12. Web page functionality and hyperlinks should be tested thoroughly and with major software browsers.
13. Acronyms appearing in a Web page must be spelled out in text of the Web page.
14. "Under Construction" Web pages are not to be published.
15. The use of Web page counters is not permitted.

* (see the Web Authors Resources section)

Non-Publicly Available Web Sites (Intranet)

The following exceptions modify the policy for Publicly Available Web Sites (Internet) for Intranet Web site (Private Web Server) use only:

Hyperlinks. Text or graphical hyperlinks may be used to direct visitors to non-government Web Sites. Graphics or logos depicting private individuals or companies and/or their products may appear on a non-publicly available Web site provided written permission is obtained from the copyright/trademark holder.

Security.

1. All non-publicly available Web sites must be in accordance with all DoD policy and guidance regarding Public Key Infrastructure (PKI) requirements. This includes obtaining and installing a DoD or a commercial, DoD-approved digital certificate, and activating a minimum of Secure Socket Layer (SSL) encryption. The only exceptions to this mandate are printers, copiers, or telecommunications equipment with a built-in Web interface, and Web servers with no physical connection to, or access to or from, the Internet.
2. Electronic mail addresses do not require an electronic mail address alias (e.g., "webmaster@odedodea.mil").
3. Information designated "For Official Use Only" may be published.
4. Names of U.S. citizens, DoDEA or DoD employees, and military personnel and their families may be published with the individual's or, in the case of minors, parent's or guardian's permission.
5. First and last names of U.S. citizens, DoDEA or DoD employees, and military personnel or their families may be published when associated with a photograph with the individual's or, in the case of minors, parent's or guardian's permission.
6. Official Component telephone numbers for DoDEA employees may be published.

Web Page Composition.

1. The Web site design must have a width of no greater than 975 pixels and must use a maximum of 32-bit color or "True Color."

2. The Web site must conform to a recommended or previously recommended Extensible Hypertext Markup Language (XHTML) / Hypertext Markup Language (HTML) standard, as documented in the specifications of the World Wide Web Consortium (W3C), and must be supported by the DoDEA standard browser software.
3. Program script (e.g., Java, JavaScript, Perl, Visual Basic, Active Server Page) is allowed if it is supported by DoDEA standard web browser software. Programmatic functionality not supported by DoDEA standard Web browser software must be avoided.
4. The use of "persistent cookies" or other methods to collect or store non-user-identifying information is permitted.

Web Author Resources

The following are Internet-based resources available at the time of publishing of this document.

Accessibility Issues.

<u>Web Site Name</u>	<u>Web Address (URL)</u>	<u>Content</u>
The Access Board (Web-based Intranet and Internet Information)	http://www.access-board.gov/sec508/guide/1194.22.htm	Accessibility requirements, examples
CAST Bobby	http://www.cast.org/bobby/	On-line Web site accessibility check
Equal Access to Software and Information	http://www.isc.rit.edu/%7Eeasi/access.html	Accessible page design, workshops, non-graphic browsers
Federal IT Accessibility Initiative	http://www.section508.gov/	Law related
IBM Accessibility Center	http://www-3.ibm.com/able/accessweb.html	Checklists and techniques
Lynx	http://lynx.browser.org/	Text-based Web browser
Web Accessibility in Mind	http://webaim.org	Accessibility How-to
World Wide Web Consortium (W3C), Web Accessibility Initiative	http://www.w3.org/WAI/	Guidelines, checklists, techniques

Web Site Registration.

<u>Web Site Name</u>	<u>Web Address (URL)</u>	<u>Content</u>
Government Information Locator Service (GILS)	http://sites.defenselink.mil/	DoD Web site registration

Writing for the Web **–An Overview–**

Assessing the Medium

- Non-linear—no beginning, middle, or end; each page is independent.
- 2-D rather than 3-D.
- Interactive rather than passive; dynamic rather than static.
- Multimedia options—audio, video, animation, interactive graphics.

What Users Want

- A well-organized site with easy-to-find information.
- Scannable, concise, and objective content.
- An informal, conversational writing style.
- A Web page that fits on one screen, i.e., no long, scrolling pages.
- Fast-loading graphics that are relevant to the site.
- Fast response times for hypertext links.

How Users Read on the Web

- Skimming or scanning of instead of reading is a fact of the Web--79 percent of Web users scan pages.
- It takes 25 percent longer to read a document on the screen than in print—if a reader does decide to read word-by-word.
- When scanning a Web page, the eye first scans the middle, then the left, and then the right of the page.
- A Web reader is—or is not—captured in the first 11 seconds he/she spends on your page.

Writing Techniques for Scannable Text

- Carefully organized information.
- Highlighted key words (i.e., hypertext in blue; typeface variations such as bold, color).
- Meaningful headings and sub-headings (i.e., not “clever” or “cute” ones; no metaphors).
- Bulleted lists.
- One idea per paragraph.
- An inverted pyramid writing style (i.e., start with the conclusion first).
- Paragraphs with no more than 4-8 lines; “chunks” of text with 100 words or less.
- Simple sentences, active verbs, good grammar.
- Half the word count of conventional writing.

Words and Phrases to Avoid

- Generally, all words or phrases specific to Web use—they're unnecessary: CLICK HERE, FOLLOW THIS LINK, LINK TO..., PRESS THIS BUTTON, POINT YOUR CURSOR.
- COOL!, HOT!, CHECK IT OUT!
- UNDER CONSTRUCTION (Web sites are *always* under construction!)

Credibility

- Proofread your document.
- Make sure the data throughout the site is consistent.
- Use high-quality graphics.
- Continually update pages to reflect all changes; note the date the page was posted or modified.
- Make sure your links and other HTML codes are accurate.
- View the document on several browsers to check the layout.

Writing for the Web

To the user, content is the most important aspect of a Web site. Unfortunately, much of current web writing does not support users in achieving their main goal, which is to find useful information as quickly as possible. It is up to you as a Web writer to make sure that a user's trip to your site is both productive and worthwhile.

Web users are critical and impatient. The quality of your site's content influences their evaluation of its credibility. Users like well-organized sites with important, factual information that is easy to find—and fast. They haven't chosen your site because you are great, but because they have something they need to find out “right now”—whether it's information about your school's calendar, your student homework policy, or PCSing details. It is your job to help them to find what they need as quickly and as painlessly as possible.

In writing for the online world, elements such as typeface, accompanying artwork, and graphic design are all part of the writer's concern. The way the words are written, the way they hang together, and the impact they will have are dependent upon non-text elements, and so all of these elements must be considered when writing. In addition, because users do not read on the Web but rather skim or scan the pages, you must design your web document to be scannable. Conventional writing guidelines also apply, however. These include carefully organizing the information, using words and categories that make sense to the audience, using topic sentences, limiting each paragraph to one main idea, and providing the right amount of information.

The purpose of this guide is to address the elements that you as a writer must consider when preparing information for on-screen presentation. It will explore aspects of writing that will give your copy more power online and enhance its value to your Web readers. This guide will not teach you how to write; presumably, you already know how to do that. Rather, its goal is to help you apply what you know about good writing to electronic media. It will focus on what it takes for your words to have the greatest possible impact on the audiences for whom they are primarily intended—your parents, your students, your local communities, your host commands, and the Department of Defense.

I. Assessing the Online Medium

In terms of getting messages across to audiences, the online medium—i.e., the Web—is inherently different from any other medium, especially print. Basically, when you read online, you are gathering information from a medium that has the following characteristics: it is non-linear, it is two-dimensional, it is interactive, and it involves multimedia.

Non-Linear

Most online documents consist of several separate files connected by hyperlinks. There is no beginning, middle, or end. That means that, as the Web writer, you don't know where a reader will "enter" your document. He may start on your homepage. A search engine such as Yahoo may drop him in the "middle" of the site (per *your* frame of reference) as the result of a search query. Or he may have personally bookmarked a "deep" internal page during a previous visit to your site.

Usually writers "push" information through various media to readers, giving readers what the writers want to give them. But in the Web environment, readers "pull" the information they need themselves. In other words, *they* take what they want from your document. This means that each separate Web page must make sense in its own context, because you don't know whether or not your reader will have the context of surrounding material to help him make sense of it, particularly since you don't know just where he's entering your site.

Two-Dimensional

A reader cannot manage an online document in the same way that he manages a printed document. He cannot judge how long it is by just looking at it. He can't thumb through it to quickly get an overview of the whole document. He can't easily browse the structure of the document, or quickly read ahead in a section of particular interest to him. It requires more time and effort on the part of the user in the two-dimensional online world to get a feel for a document to see if it's really something worth delving into. You need to make him *want* to spend time with your document.

Interactive

Reading is a passive experience for the most part. Except with some children's books, the most interaction a reader usually has with a book is the act of turning a page. Using the Web, however, is an active experience. The user interacts with his computer and the Web pages by pushing buttons and clicking on hyperlinks. He gets to make choices—Do I follow this link or that one? Do I click on this button or that one? Do I watch this video clip or listen to this audio clip?

It's crucial that you take this interactivity into account when you write for the Web and not just produce flat pages that simply mimic the printing of text on paper. If you don't, you'll disappoint your audience.

Multimedia

Print is limited in the options it has available to convey a message—basically, words and pictures. In the online world, you have a number of multimedia options available to you as part of the writing process: audio, video, animation, and interactive graphics. You

must think through your message, your audience, and the tools you have available, and decide if just words and graphics will be effective, or if you need to consider one of these multimedia tools for all or part of this message.

II. How Readers Read on the Web

Skimming or scanning instead of reading is a fact of the Web. Studies have shown that 79 percent of Web users scan pages; only 11 percent actually read word-by-word. Why? Primarily because it saves time. It takes 25 percent longer to read a document word-by-word on screen than in print. As a Web writer, you have to acknowledge this fact and write for scannability, or you have to make your material so compelling that people will want to take the extra time to read it word-by-word!

Because users scan, they tend not to read streams of text fully. Instead, they scan the text and pick out keywords, sentences, and paragraphs of interest while skipping over those parts of the text they care less about. Elements that enhance scanning include headings, large type, bold text, highlighted text, bulleted lists, graphics, captions, topic sentences, and tables of contents.

When a Web page first comes up, a user will focus his attention on the center of the window, where he will read the body text before he bothers to look over header bars or other navigational elements. When scanning the page, the reader's eye first scans the middle, then the left, and then the right of the page. You need to take this into account when you design your page.

III. Mechanics

Because skimming or scanning rather than reading word-by-word is the norm on the Web, your text should be short or at least broken up into pieces or chunks of information. Concise blocks of text mean shorter pages which will download faster and help alleviate the Web's most serious usability problem, slow response times.

Users do not like to scroll, and they especially don't like long, scrolling pages. Ideally a Web page should be visible in its entirety in the browser window without a user having to scroll down at all. A rule of thumb: avoid more than two "page downs" in order to read through the entire page.

You need to have a good balance of graphics and information. Long, continuous blocks of text may lose the attention of your users, especially in an environment where users are accustomed to visual sensation. Shape, color, and contrast should all be considered as a means of highlighting and enhancing the presentation of your information. On the other hand, explanatory text should not be lost between numerous graphics and busy backgrounds.

Users want fast-loading graphics and fast response times for hypertext links, and they want to choose whether to download large (slow downloading) photographs and graphics.

Graphics that add nothing to the text are a distraction and a waste of time for users. **Use graphical elements only if they complement your text.**

The Web is a fluid medium. Update your pages continually to reflect all changes. Statistics, numbers, and examples all need to be recent or the credibility of your site suffers. Even if your site was posted a year or so ago but is still accurate, you need to say so to assure your users of its credibility. For example, if an article was posted in 1998 and is still accurate, you might state, “This was posted in 1998 and was reviewed for accuracy in May 2001” or “The information in this document is accurate until December 2001.”

IV. Writing Techniques

Be concise. Don’t write more than 50 percent of the text you would have used in a hardcopy publication. In other words, edit your material down to the bare bones!

Use simple sentence structure. Convoluted writing and complex words are even harder to understand online. Use active verbs.

Begin each paragraph with a topic sentence to define its purpose. Make sure there is only one idea per paragraph. Try to limit each paragraph to 4–8 lines. Remember that users are primarily scanning. If you don’t start your paragraph with a defining topic sentence, they’re going to miss your point; if you have multiple ideas, they’re probably going to skip over and miss some of them.

Use the inverted pyramid writing style. Begin the content article on each hypertext page by telling your reader the conclusion, follow by the most important supporting information, and then end by giving the background. This writing style is just the reverse of the traditional pyramid writing style, which starts with a foundation and gradually builds up to a conclusion. In the inverted pyramid, which is also used for newspapers, readers can stop at any time and will still get the most important parts of the article. On the Web this is especially important because users don’t like to scroll and will very frequently only read the top part of an article or block of information.

Use informal, or conversational, writing rather than formal writing when possible. Writing in the “news you can use” style allows users to quickly find the information they want. Studies have shown that any text that begins with “you” or “your” (e.g., “You can get more information....”) has a 70 percent better chance of being read.

Avoid using “marketese,” a promotional writing style with boastful subjective claims. Promotional language forces users to spend time filtering out the exaggeration to get at the facts.

Limit the use of metaphors, particularly in headings; users might take you literally. Avoid clichés.

To make keywords stand out, highlight words by bolding. But highlight only key information-carrying words. Avoid highlighting entire sentences or long phrases since a scanning eye can only pick up two (or at most three) words at a time.

Use italics to make figure captions or sentences or phrases stand out, but don't use it for large blocks of text since italic typefaces are slower to read online.

When using a word processor to write your content and then transfer it to the Web page:

- Don't use style sheets that come with the word processor. The styles will not translate to the Web.
- Avoid smart quotes (“ ”) and special characters (e.g., ® and ™). On the Web, such items must be created using special HTML code; the Web will not recognize the special characters from your word processing program.
- Turn off auto-hyphenation. If your word processor creates hyphenated text, it could result in non-standard hyphenation when transferred to the Web.

Headings

- Use headings to make major points. Your readers should be able to scroll down the page and read your major points without stopping. Headings need to convey the main ideas presented in the page.
- Heading text should be informative, and should be able to stand on its own and make sense without the rest of the content text. Don't try to be clever or “cute” since users rely on scanning and your headings to pick up the meaning of your content text.
- The headings should not interrupt the continuity of the page. Those users reading the entire page should rely on the headings as highlights for reinforcement in their reading.

Lists

- Bulleted and numbered lists slow down the scanning eye and can draw attention to important points.
- Use numbered lists when the order of entries is important. Use unnumbered lists whenever the sequence of the entries is not important.
- Limit the number of items in a single list to no more than nine.

Terms/words/phrases to avoid: Generally, if the words or phrases are specific to Web use, then they are probably words to avoid: CLICK HERE, FOLLOW THIS LINK, BACK, CHECK IT OUT!, CLICK, COOL, HOT, LINK TO..., NEXT, PRESS THIS BUTTON, PREVIOUS, VIEW, POINT YOUR CURSOR. Especially avoid using the phrase “Under Construction.” Web sites are always under construction.

V. Hypertext links

Use links to guide the user through your document. Think of linking as the easiest and quickest means to get the user to the most relevant information.

Links are the perfect tool for giving detailed information to your users. Including extra information—especially too much detail—in your main Web page(s) will confuse your readers and lose their interest. Instead, use links to provide supplemental information such as definitions of terms and abbreviations, reference information, and background reading.

Links embedded in a document are the primary links that you want your reader to see. Since readers use links as guideposts in scanning, you want to use them correctly and write in a way that takes best advantage of them. Only the most pertinent links should actually be part of the document, i.e., part of the actual textual content. Don't let links become a distraction. Put less relevant but still meaningful links of additional information in the Web page's margin or at the end of the document under a "See Also" label.

One way to draw attention to supplemental links is to add sub-text to them, enhancing their meaning and explaining more about what the user will find at the destination. For example:

- Related Resources
A list of useful and current sites
- Helping your child with homework
Our principal, Dr. Smith, offers some advice

You can make your text short without sacrificing the depth of the content by splitting the information up into multiple parts connected by hypertext links. Each individual Web page can be brief but yet the full Web site can contain much more information than would be feasible in a printed article. Long and detailed background information can be relegated to secondary pages via links, as can information that's of interest to only a minority of users.

Links, however, should *not* be used to break up a long, linear document into multiple pages. Having to download numerous segments of one document slows down reading and makes printing out the document more difficult. The proper hypertext structure is to split the information into coherent chunks that each focus on a certain topic. Readers can then select the topics of interest to them and download only those pages.

VI. Proofreading and Testing Your Document

Proofread your document. And print it out—it's easier to read and catch errors that way. Every document should be spell-checked as a matter of course, but don't just rely on computer spell checks—they won't catch such errors as an inappropriate ITS or IT'S, or THEIR, THERE, or THEY'RE.

View your document on several browsers. The HTML code may look all right on the browser *you* are using, but that doesn't mean it will look the same on *all* browsers. Use the current and last versions of Netscape Navigator and Microsoft Internet Explorer at a *minimum*.

Make sure your links and other HTML codes are accurate. If you link to another page or site, be prepared to revisit the link's target regularly, checking for changes and updating your links if necessary. Users find it extremely frustrating—and irritating—to click on a link that is supposed to take them to another page and arrive at a page with an error message.

A Web user is captured—or not—in the first 11 seconds he spends on your page. If you don't engage him in that first 11 seconds, he will click through to somewhere else. It's your job as a Web writer to help make sure that he's so captivated that he stays!

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Tips on Writing a DoDEA School Web Site

So you're going to write a DoDEA school Web site? Where do you begin? Here are a few tips.

1. Who am I really writing this Web site for? In a word, the world! Of course, you do need to know who your *primary* audiences are, and address the site primarily to them. For all of DoDEA schools, your primary audiences are your students, your parents, your administration and staff (including potential staff), your community, your military host command, and the Department of Defense. That means you should write for those audiences, addressing *their* needs for information. But, you need to remember, too, that *anybody* that has access to the World Wide Web also has access to your site—which means virtually everybody in the world. That means you must make sure that your site is as accurate as possible and that it portrays your school in the best possible way, even to those Web visitors who have absolutely no knowledge of DoDEA and its school system. Your site may be the *only* exposure some people ever have to the Department of Defense schools; you want to make sure it's a very positive exposure!

2. How should I organize my information? How do I know what links to use? Be logical. Put yourself in your user's shoes. If you were trying to find something on a site, what would be the easiest way for you to find it? Most likely that would be the best way for other users, too. So lay out your pages that way. Use links to get to your key information, supplemental information, related information, and more detailed information. Using DoDEA's *School Web Site Contents Checklist* as a guide, key links from your homepage would include:

- Contact information
- School calendar
- School curriculum and programs
- School policies
- Registration information
- School transportation
- PSCing information
- Community connections
- Registration information
- Handbooks
- Other information and programs
- DoDEA homepage

In turn, as an example, once you linked to your contact information page, you might find the school address, phone numbers, fax numbers, and e-mail addresses; a contact for speakers for languages other than English; and links to a generic phone directory of school staff (e.g., counselors, athletic coaches, media specialists), the host military command, and employment opportunities.

3. Do I need to put my Web pages in a certain order? You do need to have some kind of structure for your own purposes to know just what you're putting on your site and

where, and to keep track of your information. But remember that the Web is a non-linear medium, and you have absolutely no idea where a visitor is going to enter your site. You can hope that he'll enter at your homepage which, from your frame of reference, is the "first" page, and then move on to the other pages, but you have no guarantee of that. He may jump in from a search engine. He may come in from a personal bookmark from a previous visit. Thus, each Web page is virtually independent and must be treated as such. The information on each page must support itself and not feed off of information on other pages because users might not ever go to those other pages to get that information.

4. We already have a number of printed booklets and pamphlets. Can't I just copy their text and put it right up on the Web? The Internet is an interactive medium—so, no, don't just copy long print documents onto the Web. It's difficult to read large blocks of text on a computer screen and most readers won't do it—they scan material instead. [See DoDEA's *Writing for the Web*.] Use bullets and lists and short chunks of text. Printed booklets can be made available in downloadable PDF format on the Web, and/or you provide a contact number where the user can request an actual printed copy.

5. There's lots of material available in print already and on other Web sites that relates to what we're doing and that would look great on our site. Can't we just use some of it? In many instances, no! Unfortunately, copyright violations and plagiarism are common problems in online media. It's not unusual for entire articles, photographs, or other works to be republished or adapted on Web sites without the original creator's permission. Many online writers mistakenly believe that if something is available on the Web that copyright protections don't apply. This is a dangerous misperception. A violation of copyright is theft, pure and simple. It doesn't matter whether you're making money off the content or not. If you publish copyrighted material without permission, you can be held accountable for that violation. Whenever you see content on some other Web site that you would like to use on your site, you should assume that it is copyrighted, and that you can only republish it with permission from the copyright holder. You must get permission *before* you republish the work. (It's best to get this permission in *writing*, even if only by e-mail, rather than just verbally.)

6. So many sites I've see have lots of graphics and animation to accompany their text. Do we have to have all that "whiz-bang" stuff for people to come to our site? No! Your primary audience is coming to your site because they need information. It's your job to provide it for them, and in the easiest and quickest way possible. The content portion of your site is its most important aspect; graphical elements should only be used when they complement the text. Also, keep in mind that new Federal regulations now require that all graphical elements be "accessible" to the visually impaired (i.e., they must be described in words on your site). (Contact the DoDEA Webmaster for further information).

7. Our information is constantly changing. Doesn't that mean that our site is constantly out of date? It means that your site, like the Web, is constantly changing and that you need to continually check it and update it! Be sure that you put a modified date on *each* of your Web pages so that users know when the last update occurred. If a page

was created a while ago but is still good, say so: “This page was created in September 2000 and was reviewed for accuracy in June 2001.”

School Web Site Contents Checklist

Following is a list of content pages for DoDEA school Web sites, including both required and suggested pages. The required pages are “musts”—the information they dispense is the primary reason every DoDEA school has a Website, and so that information must be included. The suggested pages are information that an individual school may or may not want to include, and are based upon appropriate information that other schools—in DoDEA and throughout the U.S.—have put on their Web sites. Additional informational pages may be used as long as they follow the DoDEA guidelines for Web sites. At the bottom of the page is a brief listing of those items that cannot be included on a DoDEA Web site. Please contact the DoDEA Webmaster if you need further clarification.

Required pages:

- ❑ **School Homepage**
 - ❑ A short statement about the school or a short welcoming message from the principal
 - ❑ A school mission and vision statement
 - ❑ The school leadership
 - ❑ Principal
 - ❑ Assistant principal
 - ❑ Links to other key pages, including
 - ❑ DoDEA Headquarters Web site
 - ❑ Community Guides
 - ❑ Search

- ❑ **School contact information**
 - ❑ APO address
 - ❑ Telephone/DSN
 - ❑ Telephone/commercial (from U.S., e.g., 011 + country code + city code + number)
 - ❑ Fax number
 - ❑ E-mail address (i.e., HTML “Mailto”)
 - ❑ Generic phone directory (e.g., counselor, football coach, media specialist)
 - ❑ Host military command (link)
 - ❑ Employment opportunities (link to Personnel)
 - ❑ A contact for speakers of languages other than English

- ❑ **Registration information**
 - ❑ Required documents (link to area)
 - ❑ Immunization (link to area)
 - ❑ Point-of-contact (e-mail and mailing)

- ❑ **School policies**
 - ❑ Attendance
 - ❑ Discipline
 - ❑ Dress code
 - ❑ Homework

- ❑ **School transportation**
 - ❑ Policies
 - ❑ Safety
 - ❑ Registration
 - ❑ Points-of-contact (DSN, e-mail)

- ❑ **School curriculum and programs**
 - ❑ Course descriptions
 - ❑ Link to DoDEA Curriculum Guides / Standards
 - ❑ Standardized testing and results
 - ❑ Special needs programs
 - ❑ Gifted programs
 - ❑ Distance learning
 - ❑ Athletic programs
 - ❑ Awards/Commendations

- ❑ **Information for PCSing families**

- ❑ **School calendar** (with links to descriptions of activities)

- ❑ **Community connections**
 - ❑ School Advisory Council / School Board
 - ❑ PTO/PTA/PTSA/Booster Club (e-mail contacts)
 - ❑ Command partnerships
 - ❑ Community organizations
 - ❑ School volunteering opportunities (e-mail contact)

- ❑ **Handbooks**
 - ❑ Student Handbook (PDF / downloadable format)
 - ❑ Parent Handbook (PDF / downloadable format)

- ❑ **School Improvement Plan**

- ❑ **School accreditation**

- ❑ **School demographics** (linked to school profile)

Suggested pages:

- ❑ A page of frequently asked questions and answers, with links to other pages, as required. This kind of page is a tremendous help to visitors to your site, and could include answers to questions such as school hours, the semester calendar, the lunch menu, transportation information, school supplies required, and general school policies. Consider this if you want to save yourself and your visitors time and effort.
- ❑ A page showcasing the school and highlighting its uniqueness (Possible titles: *Look at Us!*, *Spotlight On...*, *Class Act*)
- ❑ * A page highlighting student work/projects such as:
 - ❑ Student writing
 - ❑ Student artwork
 - ❑ Photos of science projects
 - ❑ Student-created web pages
- ❑ An extracurricular activities page highlighting such activities as:
 - ❑ Athletic teams
 - ❑ Intramural sports
 - ❑ School clubs
 - ❑ JROTC
- ❑ Home/school partnership information
- ❑ School history
- ❑ * School facilities and environs (e.g., gym, art room, library, media center)—general descriptions and photographs
- ❑ Alumni information/connections

* Must comply with regulations re: names and certain site-specific information.

Check to make sure that on your Web site there are:

- ❑ No student names.
- ❑ No employee names below the second tier of administrators (e.g., Assistant Principal).
- ❑ No home addresses, home telephone numbers, or home e-mail addresses.
- ❑ No posting of printed material that includes student names or other restricted information.
- ❑ No building specifications (e.g., floor plans).

- No links to non-mission-related sites.
- No “borrowed” designs or content without written authorization and attribution.