

## Chapter 8

# Online Readings

## Gaining the Most from What You Read

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WHILE THE TYPICAL E-LEARNING EXPERIENCE will introduce you to a variety of technologies (synchronous chat, asynchronous discussion boards, and so forth), to find success in most e-learning courses you will still want to be a proficient and effective reader. Despite the fact that the medium has changed and more of your reading will likely be done on the computer monitor, the essential role of reading in education has not diminished. In this chapter we will discuss the impact of new technologies not only on what you read, but on how you should read as well, since increasing your comprehension when reading materials is crucial to your success in any learning experience.

After high school and college, most of us primarily read for purposes other than “education” in our daily lives. We read the newspaper to keep up to date on world events, books for pleasure or self-improvement, and a variety of business documents for specific information. It’s not that we don’t learn from these reading experiences, but the reading is not for the same purpose as it is when taking an educational course or training program. The good news is, however, that many of the reading skills that you may have developed in other environments will provide you with a strong foundation for the reading required in e-learning. These skills, in addition to the skills you developed from years in the classroom, will provide you with a great starting place for success in the online learning environment. In this chapter we describe many of the

tools and technique facilitated by the online environment that may enrich some of your reading habits to further improve your proficiency, effectiveness, and comprehension.

After all, reading will be an essential element of almost any e-learning experience. Whether it is reading a textbook that accompanies the course, reading the postings of other learners in an asynchronous discussion board, or getting the most out of an online article posted by the instructor, reading remains at the center of most e-learning experiences.

## TECHNOLOGY AND ONLINE READINGS

Modern digital technologies have created a new world for the written word. No longer bound to paper alone, writers and publishers across the globe are continually expanding the horizons of the written word through the use of computers (and specifically the Internet). As an e-learner you will likely be exposed to a variety of these alternative media, often accompanied by the use of conventional media like the printed book or journal. The types of reading materials that you will have to purchase, or that will be furnished to you, will vary a great deal among e-learning courses. It is often to your advantage to find out the medium of the reading materials before the course begins. This will give you ample time to ensure that you have access to the required software for readings sent to you over the computer, that you have time to order necessary materials from either local or online vendors, and that you have access to technology resources required for the course (desktop video, desktop audio, and so forth). In addition, you should use the time before the e-learning experience to practice the reading techniques we will describe in this chapter. Many of the advantages of online technologies for reading (for example, document highlighters, unlimited space for taking notes) do take some practice before they are comfortable tools that can be used efficiently in an e-learning course.

### ***Reading Online***

One of the challenges many of us face when taking an e-learning course is that our reading habits are not always ideal for reading long documents on a computer monitor. As we scroll further down the page, we can often lose our place; as time passes our eyes lose focus on the materials, or other applications on our computer alert us to distractions, such as family or friends using instant messengers. Any of these, or other issues we encounter when reading online, can cause our work to suffer and diminish our e-learning experience. While online technologies can be a useful tool for us to expand our learning opportunities, simultaneously they also present us with many new obstacles (distractions) to getting the most out of the learning opportunities.

Given the decreasing costs of desktop computers and computer monitors, today most of will have access to a monitor that has at least 13.8 inches, corner to corner, of viewable space on the screen (a 15-inch monitor has 13.8 inches of viewable space and a 17-inch monitor has 15 inches of viewable space, measured corner to corner). Laptops, however, often have far less viewable space. The limited amount of viewable space complicates our reading of documents on the computer. By the time that you include menu options, scroll bars, and other selections to the computer screen, the viewable space for a text document can be quite small.

Most computer monitors offer a limited range of resolution settings to create a more useful working environment. Monitors most often offer three resolution settings: typically 640 x 480, 800 x 600, or 1024 x 768 pixels. A pixel is simply a picture element (dot) on a computer screen (Beekman, 2001). As with newspaper print, computer monitors create all images on the screen by using small dots (pixels) that when put together produce an image.

For practical purposes we will often want to change the resolution of our computer screen to maximize the information we can view (although the information will frequently get too small to read

from a reasonable distance and we will again want to shift the screen resolution). You should change the resolution setting of your monitor several times, viewing different types of documents at different resolution options, before beginning an e-learning experience.<sup>1</sup> This will allow you to choose the appropriate resolution for your reading preference while taking the course.

In addition to resolution settings, most operating systems (MS Windows, Mac OS, and others) offer software options for the visually impaired. These options, while designed for the visually impaired, can be useful to a variety of online learners who have problems reading documents on the computer screen. You will likely want to preview these options prior to beginning an e-learning course.

Of course, if you continue to struggle reading documents on the computer screen, you do have the option of printing paper copies. Printed documents have several advantages, including portability. For most online courses, however, you will not want to print all of the documents and resources used in the course (often a single e-learning course may require that you read several hundred pages of written text). You should review the documents carefully to ensure that the materials contained within are too long to be read online and/or have continuing use in the course. Many short documents, like postings to an asynchronous discussion board, will not require printing.

### ***Hypertext Markup Language (HTML) Files***

E-Learning courses will regularly use a variety of file types to present information in the course. The first, and likely the most common, is the HTML file. HTML is the language of computers on the Internet. The specific tags (that is, codes telling the computer what to

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<sup>1</sup>See [/www.microsoft.com/windows98/usingwindows/work/articles/904Apr/resolution.asp](http://www.microsoft.com/windows98/usingwindows/work/articles/904Apr/resolution.asp) for additional information on changing the resolution setting.

do with the information) make for interactive documents that can be viewed using any Internet browser (Netscape Navigator or Internet Explorer). As the reader, you will primarily see text and pictures just like you would in a printed book or magazine (although a more complex series of letters and symbols is actually informing the computer of what should be presented on the screen).

When viewing an HTML document on the computer screen using an Internet browser (for example, a lecture on the instructor's Web page), you are limited to relatively few options to assist you in reading. Internet browsers are without options like on-screen highlighters and note taking that you will find in other format readers like word processing programs and portable document format (PDF) readers. You can, however, enlarge the text of the document, which can greatly assist in reading. Within both Internet Explorer and Netscape Navigator, these options are available under the "View" menu. You may also print HTML documents or copy and paste the highlighted text of a document into an alternative word processing program like Corel Word Perfect or MS Word.

### ***Portable Document Format (PDF) Files***

Among the variety of online documents that are commonly used in e-learning is the portable document format (PDF) file. PDF files are merely images of text (or text and picture) files, very similar to a photocopy image. These images can be downloaded to an individual's computer and viewed using special PDF reading software (which is commonly free as "shareware").<sup>2</sup> The ability of the files to be viewed on computers using almost any operating system have made them extremely popular in e-learning.

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<sup>2</sup>See [www.adobe.com](http://www.adobe.com) for a free download of a PDF viewer. A free tutorial on downloading software is available at [http://newbieclub.com/cgi-bin/sgx/d.cgi?downloading-fast\\_learner](http://newbieclub.com/cgi-bin/sgx/d.cgi?downloading-fast_learner).

The disadvantage to PDF files is that, since they are image files, the reader can only view the image and cannot edit *within the image*. However, you can edit *on the image*; when reading a PDF file you will often want to take advantage of the options available to you through the PDF reading software. These options include a highlighter for marking text, onscreen “sticky notes” for making comments related to the document, and magnification for examining details of the image that may be very small. Within some PDF files, you can also copy text to be inserted into a word processing or other document. However, not all PDF files have this option available to the reader, since the creator of the PDF document can select which options are available to the reader.

### ***Word Processing Document Files***

Within most modern Internet browsers there is the built-in capability to open a document created in a word processing program. The advantage to these documents is that the reader can edit the document while reading. As with the PDF files, the reader has options of highlighting information, making comments related to the text, and increasing the magnification. In addition, the reader can actually edit the file, making changes to the text and saving those changes to his or her own computer. This is extremely useful for e-learning courses where learners work in groups to complete assignments, because these documents can be shared and edited by group members. For example, in MS Word the “Track Changes” function can assist you in keeping track of which group members inserted or deleted which words within the document. Also, the “Comments” option can be used effectively to draw a group member’s attention to specific issues within the documents.

Many of today’s word processing programs also allow the writer to save a file into the HTML format. The software adds to the text the necessary tags (computer codes) to make the document appear in the Internet browser as it would on the printed page. This too

can be useful if you are required to upload information to the Internet for the instructor or other learners to review.

### ***Online Texts***

There are a variety of electronic books (or e-books) available in today's market. Online books are primarily available either as downloads to handheld devices (such as Palm, Gemstar Ebook, Handspring, and others) or as interactive Web sites (such as [www.atomicdog.com](http://www.atomicdog.com)). E-Books come in a variety of file formats, with some companies choosing to use HTML or PDF files, while others choose proprietary software. Depending on the selection of books required for the e-learning experience, you may have to purchase additional software or e-book-related devices to obtain the flexibility of these technologies.

Online textbooks, which are available on the Internet, are likely the most common use of e-books within e-learning at this time. These interactive texts often have animated graphics, instructor notes, e-learner note-taking capability, review quizzes, online glossaries, and other features that you can use to improve the effectiveness of your reading. Some offer printable versions of the book, along with instructor notes and such, but most are only viewable one page at a time. If you do not have stable and relatively fast Internet connectivity, then some of these features may slow down your reading.

## **READING ONLINE: STEP-BY-STEP GUIDE TO IMPROVING READING SKILLS**

How do these advanced technologies change the ways in which you prepare to read for a learning experience? In many ways they don't . . . rather they just add a new twist to many of the old techniques. We should still plan to spend time preparing to read before we actually start. This preparation will provide us with a foundation on which we can later relate information and develop a strong understanding of the materials.

### ***Identifying the Purpose of Online Readings***

Before starting it is often important to reflect on the purpose of the reading within the context of the e-learning experience (see Carter, Bishop, & Kravits, 2002). This reflection will provide you with a clear set of goals for the reading. For example, if the reading is “optional” and only an “additional reference,” then you would most likely not take the time when reading to go through the details of each section or page. Rather, you may choose to review the article quickly, identifying major concepts and key points of interest.

It can be good practice to relate the reading to other activities in the e-learning experience (for example, is the reading to prepare me for an upcoming exam?). This will assist you in establishing goals for the reading.

Carter, Bishop, and Kravits (2002) identified four potential purposes for reading (noting that you may have more than one purpose for any reading event):

1. *Reading for understanding and comprehension:* Reading with this purpose commonly involves reading for general ideas and/or reading for specific facts or examples.
2. *Reading to evaluate critically:* Reading for critical evaluation commonly requires you to approach the materials with an open mind, searching for assumptions at the foundation of the writer’s argument, asking questions, and comparing the readings with other materials.
3. *Reading for practical application:* Reading with this purpose usually goes hand in hand with some action (for example, reading while attempting new commands within a software program).
4. *Reading for pleasure:* Pleasure reading rarely requires that we take notes or review critical passages. Unfortunately, pleasure reading is often limited in an e-learning experience.

Knowing the purpose (or multiple purposes) for reading is essential to success in e-learning. You will want to pace your reading,



select your reading environment, and choose your note-taking style based on your goal or purpose.

### ***Previewing the Reading***

Previewing the reading materials is a useful step in preparing for an efficient and effective reading experience. By previewing the materials you can identify key elements and words, structure your reading (for example, Chapters 1 and 3, then Chapter 2), identify the appropriate pace for your reading, and build a mental concept (or scaffolding) for what materials will be covered. Each of these will aid in the reading process and likely increase the possibility of retention.

In previewing the materials you should review the introduction, preface, and prefatory materials included with the book. These will provide you with additional information and often provide a context for the materials. In addition, authors commonly include tips for effectively gaining the most from the materials within these sections.

It is often useful to also review the references for an article or nonfiction book. The references will provide you with insights into what other writings are at the foundation of the author's arguments. Experienced readers can often predict the major concepts present in an article or book based solely on the references listed at the end.

### ***Creating a Good Reading Environment***

The environment in which you read is critical, and knowing which environment is *right* for you will be essential to your success. While some people can read effectively with the radio playing in the background, most of us cannot. And these environmental preferences often differ depending on the goal or purpose of our reading.

Knowing (and creating) the *right* atmosphere for your ideal reading environment is worth the time and extra effort it requires. For many of us, these considerations traditionally included lighting, noise, temperature, or other pressing interests (for example, basketball or figure skating events starting in thirty minutes). However,

the online environment also offers a host of other considerations. The Internet presents us with a variety of distractions from reading. Therefore, you will likely want to turn off Internet communication programs like e-mail, Internet chat, or any instant messenger since these will often distract us while we are reading. Browsing (or surfing) of the World Wide Web is also a major distraction for many of us. Therefore, closing additional windows with Web browsers is often necessary to focus attention on the reading task at hand.

While these distractions may seem minimal, proficient and effective reading does require sustained attention; hence we will want to create the ideal reading environment on our computer as well as in the room in which we are reading.

### ***Active Reading***

Proficient reading is an active process. It involves you, the reader, interacting with the reading materials and gaining the most from the time spent. Many of the techniques used for increasing the comprehension and speed of reading in the past also apply to the e-learning environment as well. The effective reading skills you have developed should be transferable, even though you may apply them through a slightly different technique.

### ***Questioning***

Questions can provide you with an active technique for gaining the most while reading. By asking questions prior to and during a reading you can focus your attention on key facts and essential information. You can use questions to guide your reading as well.

After completing a preview of the materials, but before you begin to read the content, take a few minutes to note specific questions you have related to the reading. For example, what are the relationships among different characters, topics, or time periods in the reading? Maybe even note questions related to selected sections or pages. When possible, the questions should relate to the purpose of

the reading within the context of the course. These questions can be used to acquire the essential information from the reading.

In addition, while reading you can use the questioning technique to maintain a focus on the materials. As you finish a section or page, identify questions that have not been answered up to this point. Some of the questions may be answered in the sections that follow, but others may not. Either way, by continuing to ask questions and interact with the reading materials you will be better able to maintain your focus. These questions (and their answers when available) will also provide you with study aids and advanced organizers for taking notes.

### ***Taking Notes***

Taking notes is an essential skill when reading in the e-learning environment. It is often not desirable, nor necessary, to print all of the materials you will be asked to read as part of an e-learning experience. Therefore, it is to your advantage to take detailed and accurate notes while reading the materials for the first (and possibly only) time. Taking notes can also save you time. Each time you have to go back into the e-learning environment to access online reading materials you are spending time that is not necessary. It is much more efficient to take notes while reading the materials and to refer back to those notes rather than the online materials when it comes time to compose written assignments or prepare for an examination.

When reading materials it is often useful to look for patterns in the text (chronological, place, cause-effect, comparison-contrast, and others). Effective writers will start with an outline that defines the structure of the reading; if you can decipher this outline from the reading you can often greatly increase your reading proficiency. Fortunately, clues related to a writer's outline (that is, pattern) can be identified from the section titles and headings of the materials. Using these as the basis for your note taking can often reduce your time and better organize your notes.

Writers commonly use the opening and closing paragraphs of a section to introduce and summarize the essential materials that will be discussed in the section. Reading these paragraphs and organizing your notes around their fundamental topics can also be beneficial.

Include in your notes memory aids that may be useful. Linking notes to ideas that may “jog your memory” later can be an effective study tool. Rhymes, acronyms, and other memory aids will often come to mind as you are reading the materials, so be sure to include them in your notes, as you may not remember them later.

### ***Increasing Proficiency***

While most of us read on a daily basis, for many of us reading is not a skill with which we have gained much proficiency since adolescence. We often find ourselves skimming the headlines of the newspaper or taking our time as we read a favorite work of fiction, but rarely reading complex materials in a proficient manner. And while few of us want to take a course on speed reading, there are some helpful techniques that may help us increase our proficiency, maintain our focus, and retain more information from our readings:

- Let the content of a section or page determine your pace. Allow your pace to be flexible, and don't always try to read at the same pace. Sections or pages that are outlines and contain well-structured information may be more amenable to a faster reading pace, while highly technical text may require additional attention, so don't set a single pace for the entire selection.
- Follow the major concepts and ideas more closely than the individual words. Using the section titles and headings to provide you with clues as to the major concepts or ideas will allow you to focus on the broad content rather than on the specific words of each sentence.
- Utilize the introductory and concluding paragraphs as guides for your reading. These should provide you with a sketch of

what is to come and major ideas for which you should keep an eye out.

- Have a dictionary available while reading. Don't let a limited vocabulary reduce your understanding of the materials. Use either a paper dictionary or an online dictionary to assist you whenever necessary. Often writers will try to impress us with their vocabulary, although the meanings of the words are often quite familiar to us.
- The SQ3R process for increasing reading proficiency can be of great assistance to most readers. According to Pauk (2001), the SQ3R technique was developed during World War II to assist military personnel in reading faster and studying better. SQ3R stands for *survey, question, read, recite, review*. By practicing these five steps while you read you can likely improve your efficiency and retain more knowledge from what you have read.

### ***Reflecting On and Reviewing Notes***

After taking notes related to a reading, but before you close the reading materials, it is worth taking the time to review your notes to compare them with the information in the materials. Take a few minutes to analyze the outline structure you used with your notes in comparison to the reading materials that you have now completed. Did the outline provide effective scaffolding for the reading's content? Were the questions you identified in your notes answered in later readings? Are there additional relationships among the topics in the reading that should be identified in the notes? Are new memory aids now apparent?

Reviewing your notes for completeness, accuracy, and usefulness before closing the reading materials will save you time and energy later. It should not be necessary to review the online reading materials again if your notes contain all of the required elements for your success.

## ***Developing Your Skills***

Since proficient and effective reading techniques are skills each of us must develop throughout our lifetimes, spending a few minutes after completing an online reading to reflect on the experience can be useful. Take a few minutes to note what tactics worked well with your reading preferences, what type of reading environment was the most useful in maintaining your energy, comfort, and focus, which note-taking techniques were most effective in preparing you for later use of the information, and so forth. Then note a few of the distractions that decreased your focus on the reading materials and some of the challenges you faced in effectively using the online reading materials.

We want to take away from each online reading opportunity specific “tips” for ensuring that our future online readings are even more efficient and profitable. Use the Online Reading Self-Assessment in Exhibit 8.1 to help you gauge your current skills.

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### **Exhibit 8.1. Online Reading Self-Assessment**

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The *Online Reading Self-Assessment* is intended for individuals considering e-learning as an option for meeting their educational desires or training requirements. The assessment offers readers an array of questions they should consider before enrolling in an e-learning experience, especially those experiences that rely extensively on online reading materials.

*Directions:* Take a few minutes to review the following statements and indicate your response to each. Based on your experiences as a learner, complete the self-assessment honestly. Then add up the response values and relate your total response value to the information that follows.

#### **Technology**

- |   |  |
|---|--|
| 1. Do you have access to adequate bandwidth (speed of access to Internet resources) to retrieve the files required for the learning experience? | ①   ②   ③   ④   ⑤   ⑥<br>Not Likely                      Most Likely |
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**Exhibit 8.1. Online Reading Self-Assessment, Cont'd**

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**Interpretation**

*Response values that total from 54 to 60:* You will likely be able to benefit from a variety of online reading opportunities. Many of the skills required for gaining the most from online reading materials are already developed, so you should be able focus on the learning experience.

*Response values that total from 48 to 52:* While some aspects of an e-learning experience may be a challenge, overall you should have the skills for completing the necessary online readings. You will likely want to spend some additional time during the learning experience to gain the skills in those areas that you identified as being 4 or below.

*Response values that total from 0 to 47:* There are likely several areas in which you may want to gain additional experience before entering an e-learning course that relies extensively on online reading materials. Review the factors for which your response was 4 or below, and look for opportunities to expand on your experiences in those areas.

*Note:* The questions in the assessment are based on both my experiences as on online instructor and as a student, as well as on the materials I use in my course titled “Fundamentals of Success in Online Learning.” As yet, the assessment has not been statistically validated nor scientifically tested. But taking each of the questions into account when considering e-learning as an option can be extremely useful.

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## SUMMARY

Reading continues to be an essential component of most learning experiences, whether they utilize the latest in online technologies or are presented in the conventional classroom. Therefore, in order to gain the most from an e-learning experience you should learn how to apply many of the tactics developed to increase your reading proficiency and effectiveness. Fortunately, many of the tactics used to increase speed and retention from text printed on paper also apply to text that appears on the computer monitor. There are, however, several techniques for adapting those tactics to the technology-based learning environment. As we pointed out in this chapter:



- Success in online learning requires proficient and effective reading skills.
- Some useful reading skills can be adapted from the conventional book environment, others will have to be developed for online reading materials.
- Software applications typically offer many useful tools and resources that can help you read more efficiently and effectively.
- Active reading skills can be your secret for success.

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