

5 Guidelines for Using Electronic Resources (E-Resources)

Publishing environments have changed dramatically over the past decade, particularly relating to the Internet and to electronic forms of presentation in general. Although source material on the Internet presents new challenges for documentation in writing and research (for example, the meaning, nature, and form of electronic resources are still evolving), some basic guidelines for standards have emerged. The direction provided here is based on *The Chicago Manual of Style* (2003) for referring to or citing the most common types of e-resources currently used by social scientists in research and writing.

The Chicago Manual of Style online (http://www.chicagomanualofstyle.org/tools_citationguide.html) also provides a useful quick guide to citations which includes examples of the most common types of electronic references.

(A review of style guides used by other professional and scientific associations also provided valuable insights in defining issues and setting some ground rules for this *ASA Style Guide*.)

In general, information about three types of e-resources will be covered:

- **Journal articles, periodicals, reports, and books** (or parts of them), which are now widely available through the Internet. Some of these exist only in online forms, but many other online periodicals in fact replicate their printed versions (and they are not likely to change in form). Examples include journal articles available through JSTOR and a report or bulletin in PDF form on the Bureau of Justice Statistics (BJS) Web site.

- **Other sources available on the Internet**, such as Web sites, periodicals, zines, Web logs (or “blogs”), electronic mailing lists, documents, records, data, codekeys, and Web-based newsletters.
- **Publications, documents, and data available in various formats** such as Machine Readable Data Files (MRDF), CD-ROM, DVD, videocassettes, and other media forms.

5.1 Some Key Terms and Definitions for Electronic Resources

The list below includes preferred spelling and definitions for some key terms used for electronic resources. The forms of the acronyms (including capitalization and hyphenation) and definitions are drawn from several sources, including *The Chicago Manual of Style* (2003:211, 823–40), homepages, and Webopedia (<http://www.webopedia.com>), a free online dictionary for words, phrases, and abbreviations that are related to computer and Internet technology.

In determining when words should be hyphenated (*e-mail*, *e-commerce*): For compound expressions that include “electronic” (*electronic-commerce*, *electronic-loan*, *electronic-mail*), abbreviate “electronic” and hyphenate words according to the form of *e-commerce*, *e-loan*, *e-journal*, and *e-mail*.

In the following list, an asterisk (*) indicates that all three forms are acceptable.

ASCII

American Standard Code for Information Interchange. ASCII codes only letters, numerals, punctuation marks, spaces, returns, line feeds, and tabs with no additional formatting. Text files are often referred to as ASCII files, although other kinds of data (such as SGML and PostScript) can also be stored as ASCII files. (CMOS)

Attachment

A file attached to an e-mail message. Many e-mail systems only support sending text files as e-mail. If the attachment is a binary file or formatted text file (such as an MS Word document), it must be encoded before it is sent and decoded once it is received. There are a number of encoding schemes, the two most prevalent being Unicode and MIME. Retrieved January 15, 2007 (<http://www.webopedia.com/TERM/a/attachment.html>).

Beta testing

The final checking of a computer application (such as a Web site) before it is released. (CMOS)

Bitmap

A digital representation of an image consisting of an array of pixels, in rows and columns that can be saved to a file. (CMOS)

Blog

(n.) Short for Web log, a blog is a Web page that serves as a publicly accessible personal journal for an individual. Typically updated daily, blogs often reflect the personality of the author. (v.) To author a Web log. Other forms: Blogger (a person who blogs). Retrieved January 15, 2007 (<http://www.webopedia.com/TERM/b/blog.html>).

Breadcrumbs

A Web site navigation technique that typically appears horizontally near the top of a Web page, providing links back to each previous page that the user navigates through in order to get to the current page. Basically, breadcrumbs provide a trail for the user to follow back to the starting/entry point of a Web site and may look something like this:

home page > section page > sub section page

This technique also is referred to as a breadcrumb trail. Retrieved January 15, 2007 (<http://www.webopedia.com/TERM/b/breadcrumbs.html>).

CD-ROM

Compact disc read-only memory. A type of compact disc used for storing digital data that can be read optically and processed by a computer. (CMOS)

CRC

Camera-ready copy. Artwork and text that are ready to be photographed for reproduction without further alteration. (CMOS)

Database

A collection of information organized in such a way that a computer program can quickly select desired pieces of data. Retrieved January 15, 2007 (<http://www.webopedia.com/TERM/d/database.html>).

Digital

Transmitted or stored in an electronic format consisting of a sequence of discrete bits (0s and 1s), as with data such as text and images. (CMOS)

Disk, disc

Disk is the usual spelling (floppy disk). *Disc* is preferred in a few specialized applications (compact disc). (CMOS: 2003:211)

DOI

Digital Object Identifier. A means of identifying a piece of intellectual property on a digital network and associating it with related current data in a structured extensible way. A DOI differs from a URL because it defines an object as a first-entity, not simply the place where the object is located. Retrieved January 12, 2007 (<http://www.doi.org/faq.html>).

Dpi

Dots per inch. A measurement of the resolution of a printed image. The term is also used to describe the maximum resolution of the output device (as in a 1200-dpi printer). (CMOS)

DTD

Document type definition. In SGML or XML, a set of rules about the structure of a document that dictate the relationship among different tags and allowable text or elements within specified tags. (CMOS)

DVD

Digital versatile (or video) disc. A type of compact disc that can store up to 17 gigabytes of digital video, audio, or computer data. (CMOS)

E-commerce

Electronic commerce. Business that is conducted over the Internet using any of the applications that rely on the Internet, such as e-mail, instant messaging, shopping carts, and Web services such as FTP among others. Electronic commerce can be between two businesses transmitting funds, goods, services and/or data or between a business and a customer. Retrieved January 15, 2007 (http://www.webopedia.com/TERM/e/electronic_commerce.html).

E-mail

Electronic mail. The transmission of messages over communications networks. Retrieved January 15, 2007 (http://www.webopedia.com/TERM/e/e_mail.html).

E-NOAH

A dedicated association database and management software system developed and licensed by JL Systems of Annandale, VA. (ASA membership data are built on e-NOAH.)

EPS, eps, .eps*

Encapsulated PostScript file. A type of file used to encode graphics so they can be embedded in a larger PostScript file. (CMOS)

File

A block of digital information with a unique name and location in a computer system or external storage medium (such as a disk) that can be accessed and manipulated by users of the system or by the system itself. Programs, documents, and images are all examples of data stored in files. (CMOS)

FTP

File transfer protocol. The protocol, or set of instructions and syntax, for moving files between computers on the Internet. (CMOS)

GIF, gif, .gif*

Pronounced jiff or giff (hard g). *Graphics interchange format*. A bit-mapped graphics file format used by the World Wide Web, CompuServe, and many Bulletin Board Systems. GIF supports color and various resolutions. It also includes data compression, but because it is limited to 256 colors, it is more effective for scanned images such as illustrations rather than color photos. Retrieved January 15, 2007 (<http://www.webopedia.com/TERM/G/GIF.html>).

Homepage

The main page of a Web site. Typically, the homepage serves as an index or table of contents to other documents stored at the site. Retrieved January 15, 2007 (http://www.webopedia.com/TERM/h/home_page.html).

Host

A computer system that is accessed by a user working at a remote location. Typically, the term is used when there are two computer systems connected by modems and telephone lines. The system that contains the data is called the host, while the computer at which the user sits is called the remote terminal. Retrieved January 15, 2007 (<http://www.webopedia.com/TERM/h/host.html>).

HTML, html, .html*

HyperText Markup Language. A specific set of tags used to describe the structure of hypertext documents that make up most Web pages. Web browsers interpret these tags to display the text and graphics on a Web page. HTML is an application of SGML. (CMOS)

Hypertext

The organization of digital information into associations connected by links. In a hypertext environment, objects such as text and images can contain links to other objects in the same file or in external files, which users can choose to follow. (CMOS)

Internet

A global, public network of computers and computer networks that communicate using TCP/IP (Transmission Control Protocol/

Internet Protocol). The Internet is used for such applications as e-mail and the World Wide Web. (CMOS)

JPEG, jpeg, .jpg*

Joint Photographic Experts Group. Pronounced jay-peg. JPEG is a lossy compression technique for color images. (Lossy compression techniques attempt to eliminate redundant or unnecessary information, resulting in some loss of data.) Although it can reduce file sizes to about 5 percent of their normal size, some detail is lost in the compression. Retrieved January 15, 2007 (<http://www.webopedia.com/TERM/J/JPEG.html>).

JSTOR

Journal Storage: The Scholarly Journal Archive. JSTOR is a not-for-profit organization with a dual mission to create and maintain a trusted archive of important scholarly journals and to provide access to these journals as widely as possible. JSTOR offers researchers the ability to retrieve high-resolution, scanned images of journal issues and pages as they were originally designed, printed, and illustrated. The journals archived in JSTOR span many disciplines. Retrieved January 14, 2007 (<http://www.jstor.org/about/desc.html>).

LISTSERV

Trademarked, proprietary name, which has been widely used as a generic term for "electronic mailing list." LISTSERV should only be used when it is clear that the trademarked version is being referenced. Retrieved January 15, 2007 (<http://www.webopedia.com/TERM/L/Listserv.html>).

OCR

Optical character recognition. A technology that converts images of text into character data that can be manipulated like any other digital text. (CMOS)

Online

Connected to, served by, or available through a system and especially a computer or telecommunications system (as the Internet). Retrieved January 14, 2007 (<http://www.m-w.com/dictionary/online>).

PDF, pdf, .pdf*

Portable Document Format. An Adobe file format to which a PostScript file can be converted without loss of fonts, formatting, or graphics. This format is preferable to PostScript in certain situations because it allows some editing, compresses the amount of memory needed for the graphics, and is more uniform, causing fewer problems at the printer. (CMOS)

Pixel

The basic unit that constitutes a digital image. Each pixel contains black and white, grayscale, or color information about the square it represents. (CMOS)

Protocol

An agreed-upon format for transmitting data between two devices. The protocol determines the following: the type of error checking to be used; data compression method, if any; how the sending device will indicate that it has finished sending a message; and how the receiving device will indicate that it has received a message. There are a variety of standard protocols from which programmers can choose. Retrieved January 15, 2007 (<http://www.webopedia.com/TERM/p/protocol.html>).

Resolution

The number of pixels per unit of measure used to form an image. In the United States, image resolution is calculated per inch: the more pixels per inch, the higher the quality of the image. (CMOS)

Scan

To produce a digital bitmap of an image (text or graphics) using a device that senses alternating patterns of light and dark and of color. The resolution and scaling percentage of the desired output should be considered before the image is scanned. (CMOS)

Search engines

A program that searches documents for specified keywords and returns a list of the documents where the keywords were found. Although search engine is really a general class of programs, the term is often used to specifically describe systems like Alta Vista that enable users to search for documents on the World Wide

Web and USENET newsgroups. Retrieved February 28, 2007 (http://www.webopedia.com/TERM/s/search_engine.html).

SGML

Standard Generalized Markup Language. An international standard for constructing sets of tags. SGML is not a specific set of tags but a system for defining vocabularies of tags (the names of the tags and what they mean) and using them to encode documents. (CMOS)

Text file

An informal term for a file that contains data encoded using ASCII. (CMOS)

TIFF, tiff, .tif*

Tagged Image File Format. A file format developed by Aldus and Microsoft and used to store bitmapped graphics including scanned line art and color images. (CMOS)

URL

Uniform Resource Locator. The global address of documents and other resources on the World Wide Web. Retrieved January 15, 2007 (<http://www.webopedia.com/TERM/U/URL.html>).

Web page

A virtual document delivered via the World Wide Web and viewed in a Web browser. (CMOS) Web browsers are software systems (such as Netscape Navigator and Microsoft Explorer) used to locate and display Web pages. Retrieved February 28, 2007 (<http://www.webopedia.com/TERM/b/browser.html>).

Web site

A site (location) on the World Wide Web. Each Web site contains a homepage, which is the first document users see when they enter a site. The site might also contain additional documents and files. Each site is owned and managed by an individual, company, or organization. Retrieved January 15, 2007 (http://www.webopedia.com/TERM/w/web_site.html).

World Wide Web

Also called the Web. The Internet's most widely used information-retrieval service. The World Wide Web uses Hypertext Transmission Protocol (HTTP) to allow users to request and retrieve documents (Web pages and multimedia objects) from other computers anywhere on the Internet. (*CMOS*)

5.2 The Internet

The Internet is a vast network of computers linked through interfaces such as the World Wide Web. The Web is the most common method social scientists use to access sources on the Internet, and although many sources (e.g., those in aggregated databases such as JSTOR, PsychInfo, HeinOnline) are the same as print-edition versions; others exist in a great variety of structures and formats. Nevertheless, the following basic rules apply:

- References (whether from print forms or online sources) should provide all basic elements of information about a source (name of author or institution, year of publication, name of article, title of publication, and name and location of publisher) so that the reader can access the material being cited.
- The sources (or versions of them) that are actually used are those that should be cited as references.
- Sources on the Internet that are not likely to change (e.g., those in PDF or TIFF form, those that are accessed through JSTOR, or those that are exact replicas of print-edition forms, such as newspapers) should be cited in print-form only instead of in ASCII, HTML, or other Web-based format versions. Even when citing PDF versions, however, use forms of citations that will be most widely accessible. Documents in these “non-changeable forms” may not be accessible for the following reasons:

- Some printed documents in electronic formats exist in databases that are subscription based and not widely available.
- Online newspapers and periodicals generally have a time limit for general access to some articles.
- Pursuant to court actions and other legal restrictions, some documents do not exist in electronic forms that are generally available.
- In all cases when using sources from the Internet, use names of authors (whenever possible), document titles, date of publication (or date of access or retrieval), and an address (such as a URL locator). The URL locator is critical in locating documents on the Internet. For example the ASA URL is <http://www.asanet.org/>.
- Because Web sites are modified, redesigned, updated, or deleted on an ongoing basis, it is important to take the following precautions:
 - If a URL is cited, print and/or save in electronic form the data or document(s) obtained from it.
 - Check spellings of URL addresses so that a source being cited is completely and accurately identified.
 - Avoid citing documents in URL addresses that no longer exist by testing them before final submission of a manuscript.
 - Do not type URL addresses: Use the copy function on a browser to transfer URL addresses to a manuscript.

5.3 Forms of Electronic References

5.3.1 E-Books

The form for citing e-books is the same as that used for citing print edition volumes, with the addition of information about the medium consulted. If an e-book was consulted online, the URL and date of access should also be cited (CMOS 2003:684–86):

Spalter-Roth, Roberta, Norman Fortenberry, and Barbara Lovitts. 2007. *The Acceptance and Diffusion of Innovation: A Cross-Disciplinary Approach to Instructional and Curricular Change in Engineering*. Washington, DC: American Sociological Association. (Available on CD-ROM only.)

If a book is available in more than one format, other formats may be listed as well:

Snyder, Howard N. and Melissa Sickmund. 2006. *Juvenile Offenders and Victims: 2006 National Report*. Pittsburgh, PA: National Center for Juvenile Justice. (Also available at <http://ojjdp.ncjrs.gov/ojstatbb/nr2006/downloads/NR2006.pdf>.)

5.3.2 Online Periodicals Available in Print and Online Form

The general form of online periodicals (including online journals, magazines, and newspapers) follows the pattern for all periodicals (see Section 4.3.2). If a print journal article is viewed in an online aggregate database such as JSTOR, indicate the database source and retrieval date as follows:

Scott, Lionel D., Jr. and Laura E. House. 2005. "Relationship of Distress and Perceived Control to Coping with Perceived Racial Discrimination among Black Youth." *Journal of Black Psychology* 31(3):254–72. (Retrieved from JSTOR on December 16, 2006.)

5.3.3 Online Periodicals Available in Online Form Only

Schafer, Daniel W. and Fred L. Ramsey. 2003. "Teaching the Craft of Data Analysis." *Journal of Statistics Education* 11(1). Retrieved December 12, 2006 (<http://www.amstat.org/publications/jse/v11n1/schafer.html>).

5.3.4 Web Sites

A general rule may be applied to the citing of Web sites: If the Web site contains data or evidence essential to a point being addressed in the manuscript, it should be formally cited with the URL and date of access.

- **Example 1:** A document retrieved from an institution with a known location:

Text: (ASA 2006)

Reference:

American Sociological Association. 2006. "Status Committees." Washington, DC: American Sociological Association. Retrieved December 12, 2006 (<http://www.asanet.org/cs/root/leftnav/committees/committees>).

- **Example 2:** A report published in 2003 retrieved in January 2007 from a university Web site:

Text: (Johns Hopkins University 2003)

Reference:

Johns Hopkins University. 2003. *Economic Impact of the Johns Hopkins Institutions in Maryland*. Silver Spring, MD: Johns Hopkins University and Johns Hopkins Medicine. Retrieved January 26, 2007 (http://www.jhu.edu/news_info/reports/impact/2003/impact2003.pdf).

- **Example 3:** A document retrieved from a corporate Web site (unknown location):

Text: (IBM 2007)

Reference:

IBM. 2007. "Education: Solutions and Open Technologies for K–12 Schools, Higher Education and Lifelong Learning." Retrieved January 30, 2007 (<http://www-3.ibm.com/industries/education/index.jsp?re=ibmhpdd>).

5.3.5 Web Log Entries or Comments

The *ASA Style Guide* recommends the formal version of citing Web log (also known as "blogs") entries. If references to Web logs are included in a manuscript, they should be cited as follows:

Text: (DeLong 2007)

Reference:

DeLong Brad. 2007. "Thomas Piketty and Emmanuel Saez Give Their Current View on American Income Inequality." The Brad DeLong Blog, January 7, 2007. Retrieved January 9, 2007 (http://econ161.berkeley.edu/movable_type).

5.3.6 E-Mail Messages

If e-mails are referred to in a manuscript, they (like other personal communications) should be entered as part of the text and referenced in a footnote or endnote. E-mails are rarely cited in a reference list. When referring to communication by e-mail, obtain the permission of the owner before using it; do not cite the e-mail address.

Text: In an e-mail message to the author, Jones indicated that was leaving the university.

Footnote: ⁸ John Jones, e-mail message to author, May 23, 1999.

5.3.7 Items in Online Database

Journal articles published in online databases should be cited as shown in Section 5.3.2.

For references obtained from an online database, include the URL and an access date:

Text: (National Center for Health Statistics 2007)

Reference:

National Center for Health Statistics. 2007. "Faststats, A to Z." Retrieved February 2, 2007 (http://www.cdc.gov/nchs/fastats/map_page.htm).

5.3.8 Data and Supporting Materials: Machine Readable Data Files (MRDF)

Researchers frequently cite data and related information (codekeys, statistical program information, variable lists) available in various Machine Readable Data Files (MRDF). These sources may be in either electronic media (CD-ROM, DVD, Magnetic tape) or downloaded from an online source. Examples of how to cite MRDF are included in Sections 11 and 12 (for online sources) of the Appendix.

5.4 Audiovisual Materials

5.4.1 CD-ROM or DVD-ROM

References to materials on CD-ROM are treated similarly to printed works (*CMOS* 2003:726). Place of publication may be omitted unless relevant.

5.4.2 Other Audiovisual Materials

For general guidelines for citations and references for other types of audiovisual media (film, sound recordings, slides, filmstrips, and videos), see *CMOS* 2003:724–27.

Papademas, Dianne, ed. 2002. *Visual Sociology: Teaching with Film/Video, Photography, and Visual Media*. 5th

ed. VHS. Washington, DC: American Sociological Association.

JackDanyells. 2007. "TheYouTube Guided Tour." YouTube Web site. Retrieved February 2, 2007 (<http://www.youtube.com>).

Public Broadcasting Corporation (PBS). 2004. "Bill Moyers Talks with Ethicist Peter Singer." May 14, 2004. PBS Web site: NOW with Bill Moyers. This Week. Retrieved January 31, 2007 (http://www.pbs.org/now/thisweek/index_051404.html).

Library of Congress. 2007. "Addams, Jane. Photograph." Image (TIFF). Famous People: Selected Portraits from the Collections of the Library of Congress. Retrieved February 28, 2007 (<http://lcweb2.loc.gov/master/pnp/cph/3a10000/3a13000/3a13000/3a13016u.tif>).

Additional examples of preceding forms of e-resources are included in Sections 11 and 12 of the Appendix.