What is MLA style?

The Modern Language Association (MLA) sponsors the MLA style, a documentation system widely used in English courses and many of the humanities. MLA style involves two equally important features that need to appear in research papers.

First, MLA style calls for you to acknowledge your sources within the text of your research papers by using parenthetical documentation. Section 33b explains how parenthetical documentation works, and section 33c shows several different models of parenthetical documentation.

Second, MLA style calls for you to list complete bibliographic information about each source that you’ve mentioned in your parenthetical references. This bibliographic list, titled Works Cited, needs to appear on a separate page at the end of your research paper. It includes only the sources you’ve actually used in your research paper, not any you’ve consulted but haven’t used. Section 33d gives instructions for composing your Works Cited pages, followed by models, each based on a different kind of source (book, article, Web site, etc.) that you might use in your research papers.

For examples of research papers that use MLA-style parenthetical documentation and Works Cited lists, see sections 33e and 36e. As you read these papers, notice how the two requirements for crediting sources work together so that readers can learn the precise origin of the material that is quoted, paraphrased, and summarized. If you need more information than we cover in this chapter, consult the sixth edition of the MLA Handbook for Writers of Research Papers (2003) by Joseph Gibaldi.

What is MLA parenthetical documentation?

MLA-style parenthetical documentation, also called either parenthetical references or in-text citations, is the method required to place source information in parentheses within the sentences of your research papers. This information, given each time that you quote, summarize, or paraphrase specific parts of sources in your paper, signals readers that your material draws on scholarship about your topic.

In parenthetical references, an author’s name (or, if none, a shortened title of the work) identifies the source, and the exact page number tells
where readers can locate the original material. For readability and good writing technique, always try to introduce names of authors and titles of sources in your own sentences. Then, you need only put into parentheses the page number where you found the material. When possible, position a parenthetical reference at the end of the quote, summary, or paraphrase it refers to—preferably at the end of a sentence, unless that would place it too far from the source's material. When you place the parenthetical reference at the end of a sentence, put it before the sentence-ending period. The one exception to this rule concerns quotations that you set off block style (MLA requires that quotations longer than four typed lines be handled this way), where you put the parenthetical reference after the period.

What are MLA guidelines for parenthetical documentation?

This section shows examples of how to handle parenthetical documentation in the body of your research papers. The following directory corresponds to the numbered examples that follow it. Remember, try to integrate authors' names and titles of SOURCES into your sentences whenever possible (33b).

Directory—MLA Parenthetical Citations
1. Paraphrased or Summarized Source—MLA
2. Source of a Short Quotation—MLA
3. Source of a Long Quotation—MLA
4. One Author—MLA
5. Two or Three Authors—MLA
6. More Than Three Authors—MLA
7. More Than One Source by an Author—MLA
8. Two or More Authors with the Same Last Name—MLA
9. Group or Corporate Author—MLA
10. Work Cited by Title—MLA
11. Multivolume Work—MLA
12. Novel, Play, Poem, or Short Story—MLA
13. Bible or Sacred Text—MLA
14. Work in an Anthology or Other Collection—MLA
15. Indirect Source—MLA
16. Two or More Sources in One Reference—MLA
17. An Entire Work—MLA
18. An Electronic Source with a Name or Title and Page Numbers—MLA
19. An Electronic Source with Paragraph or Screen Numbers—MLA
20. An Electronic Source Without Page or Paragraph Numbers—MLA
What are MLA guidelines for parenthetical documentation?

1. Citing a Paraphrased or Summarized Source—MLA

According to Brent Staples, IQ tests give scientists little insight into intelligence (293). [Author name cited in text; page number cited in parentheses.]

In "The IQ Cult," the journalist Brent Staples states that IQ tests give scientists little insight into intelligence (293). [Title of source, author name, and author credentials cited in text; page number cited in parentheses.]

IQ tests give scientists little insight into intelligence (Staples 293). [Author name and page number cited in parentheses.]

2. Citing the Source of a Short Quotation—MLA

Given that "thoughts, emotions, imagination and predispositions occur concurrently . . . [and] interact with other brain processes" (Caine and Caine 66), it is easy to understand why "whatever [intelligence] might be, paper and pencil tests aren’t the tenth of it" (Staples 293).

Coles asks, "What binds together a Mormon banker in Utah with his brother, or other coreligionists in Illinois or Massachusetts?" (2).

3. Citing the Source of a Long Quotation—MLA

A long quotation in MLA style consists of more than four typed lines. It is set off block style, indented one inch or ten spaces from the left margin. Never put quotation marks around a set-off quotation because the indentation and block style communicate that the material is quoted. At the end of an indented quotation, place the parenthetical reference after the end punctuation mark.

Gray and Viens explain how, by tapping into a student’s highly developed spatial-mechanical intelligence, one teacher can bolster a student’s poor writing skills:

The teacher asked that during “journal time” Jacob create a tool dictionary to be used as a resource in the mechanical learning center. After several entries in which he drew and described tools and other materials, Jacob confidently moved on to writing about other things of import to him, such as his brothers and a recent birthday party. Rather than shy away from all things linguistic—he previously had refused any task requiring a pencil—Jacob became invested in journal writing. (23–24)

4. Citing One Author—MLA

Give an author’s name as it appears on the source: for a book, on the title page; for an article, directly below the title or at the end of the article. Many nonprint sources also name an author; for CDs, tapes, and software, for example, check the printed sleeve or cover. For an online source, identify the author exactly as identified online.

One test asks four-year-olds to choose between one marshmallow now or two marshmallows later (Gibbs 60).
MLA DOCUMENTATION WITH CASE STUDY

5. Citing Two or Three Authors—MLA
Give the names in the same order as in the source. Spell out and. For three authors, use commas to separate the authors' names.

As children get older, they begin to express several different kinds of intelligence (Todd and Taylor 23).

Another measure of emotional intelligence is the success of inter- and intrapersonal relationships (Voigt, Dees, and Prigoff 14).

6. Citing More Than Three Authors—MLA
Name all authors or use the first author's name only, followed by et al. (the Latin abbreviation for et alii, meaning “and others”), either in a parenthetical reference or in your sentence. In MLA citations, do not underline or italicize et al. No period follows et, but do use a period after al.

Emotional security varies, depending on the circumstances of the social interaction (Carter et al. 158).

Carter et al. have found that emotional security varies, depending on the circumstances of the social interaction (158).

7. Citing More Than One Source by an Author—MLA
When you use two or more sources by an author, include the relevant title in each citation. In parenthetical citations, use a shortened version of the title. For example, in a paper using two of Howard Gardner's works, Frames of Mind: The Theory of Multiple Intelligences and “Reflections on Multiple Intelligences: Myths and Messages,” use Frames and “Reflections.” Shorten the titles as much as possible, keeping them unambiguous to readers and starting them with the word by which you alphabetize each work in WORKS CITED. Separate the author's name and the title with a comma, but do not use punctuation between the title and the page number. When you incorporate the title into your own sentences, you can omit a subtitle, but never shorten the main title.

Although it seems straightforward to think of multiple intelligences as multiple approaches to learning (Gardner, Frames 60–61), an intelligence is not a learning style (Gardner, “Reflections” 202–03).

8. Citing Two or More Authors with the Same Last Name—MLA
Use each author's first initial and full last name in each parenthetical citation. This is the only instance in MLA style where you use an initial in a parenthetical reference. If both authors have the same first initial, use the full name in all instances.

According to Anne Cates, psychologists can predict how empathetic an adult will be from his or her behavior at age two (41), but other researchers disagree (T. Cates 171).
What are MLA guidelines for parenthetical documentation?

9. Citing a Work with a Group or Corporate Author—MLA

When a corporation or other group is named as the author of a source you want to cite, use the corporate name just as you would an individual’s name.

In a five-year study, the Boston Women's Health Collective reported that these tests are usually unreliable (11).

A five-year study shows that these tests are usually unreliable (Boston Women's Health Collective 11).

10. Citing a Work Listed by Title—MLA

If no author is named, use only the title in citations. In your own sentences, use the full main title and omit a subtitle, if any. For parenthetical citations, shorten the title as much as possible (making sure that the shortened version refers unambiguously to the correct source), and always make the first word the one by which you alphabetize it. “Are You a Day or Night Person?” is the full title of the article in the following citation.

The "morning lark" and "night owl" descriptions typically are used to categorize the human extremes ("Are You" 11).

11. Citing a Multivolume Work—MLA

When you cite more than one volume of a multivolume work, include the relevant volume number in each citation. Give the volume number first, followed by a colon and one space, followed by the page number(s).

By 1900, the Amazon forest dwellers had been exposed to these viruses (Rand 3: 202).

Rand believes that forest dwellers in Borneo escaped illness from retroviruses until the 1960s (4: 518–19).

12. Citing Material from a Novel, Play, Poem, or Short Story—MLA

When you cite material from literary works, providing the part, chapter, act, scene, canto, stanza, or line numbers usually helps readers locate what you are referring to more than do page numbers alone. Unless your instructor tells you not to, use arabic numerals for these references, even if the literary work uses roman numerals.

For novels that use them, give part and/or chapter numbers after page numbers. Use a semicolon after the page number but a comma to separate a part from a chapter.

Flannery O'Connor describes one character in The Violent Bear It Away as "divided in two—a violent and a rational self" (139: pt. 2, ch. 6).
MLA DOCUMENTATION WITH CASE STUDY

For plays that use them, give act, scene, and line numbers. Use periods between these numbers.

Among the most quoted of Shakespeare’s lines is Hamlet’s soliloquy beginning “To be, or not to be: that is the question” (3.1.56).

The old man in John Collier’s “The Chaser” says about his potions, “I don’t deal in laxatives and teething mixtures . . .” (79).

For poems and songs, give canto, stanza, and line numbers. Use periods between these numbers. Because the typed or typeset abbreviation for line (l., plural ll.) can be misread as the numeral 1, the MLA Handbook advises beginning your first reference to lines with the word line (or lines). After the first citation, omit the word and give only the numbers.

In “To Autumn,” Keats’s most melancholy image occurs in the lines “Then in a wailful choir the small gnats mourn / Among the river swallows” (3.27–28).

13. Bible or Sacred Text—MLA

Give the title of the edition you’re using, the book (in the case of the Bible), and the chapter and verse. Spell out the names of books in sentences, but use abbreviations in parenthetical references.

He would certainly benefit from the advice in Ephesians to “get rid of all bitterness, rage, and anger” (New International Version Bible, 4.31).

He would certainly benefit from the advice to “get rid of all bitterness, rage, and anger” (New International Version Bible, Eph. 4.31).

14. Citing a Work in an Anthology or Other Collection—MLA

You may want to cite a work you have read in a book that contains many works by various authors and that was compiled or edited by someone other than the person you are citing. Your in-text citation should include the author of the selection you’re citing and the page number. For example, suppose you want to cite the poem “Several Things” by Martha Collins, in a literature text edited by Pamela Annas and Robert Rosen. Use Collins’s name and the title of her work in the sentence and the line numbers (see Item 12) in a parenthetical citation.

In “Several Things,” Martha Collins enumerates what could take place in the lines of her poem: “Plums could appear, on a pewter plate / A dead red hare, hung by one foot. / A vase of flowers. Three shallots” (2-4).

15. Citing an Indirect Source—MLA

When you want to quote words that you found quoted in someone else’s work, put the name of the person whose words you are quoting into your own sentence. Give the work where you found the quotation either in your sentence or in a parenthetical citation beginning with qtd. in.
What are MLA guidelines for parenthetical documentation?

Martin Scorsese acknowledges the link between himself and his films: "I realize that all my life, I've been an outsider. I splatter bits of myself all over the screen" (qtd. in Giannetti and Eyman 397).

Giannetti and Eyman quote Martin Scorsese as acknowledging the link between himself and his films: "I realize that all my life, I've been an outsider. I splatter bits of myself all over the screen" (397).

16. Citing Two or More Sources in One Reference—MLA

If more than one source has contributed to an idea, opinion, or fact in your paper, cite all of them. In a parenthetical citation, separate each block of information with a semicolon followed by one space.

Once researchers agreed that multiple intelligences existed, their next step was to try to measure or define them (West 17; Arturi 477; Gibbs 68).

Because long parenthetical citations can disturb the flow of your paper, you might want to use an endnote or footnote for citing multiple sources; see 33d.2.

17. Citing an Entire Work—MLA

References to an entire work usually fit best into your own sentences.

In Frames of Mind, Gardner proposes a revolutionary expansion of our understanding of human intelligence.

18. Citing an Electronic Source with a Name or Title and Page Numbers—MLA

The principles that govern parenthetical references for electronic sources are exactly the same as the ones that apply to books, articles, letters, interviews, or other sources. When an electronically accessed source identifies its author, use the author's name for parenthetical references. When an electronic source has page numbers, use them exactly as you would the page numbers of a print source.

19. Citing an Electronic Source with Paragraph or Screen Numbers—MLA

When an electronic source has numbered paragraphs or screens (instead of page numbers), use them for parenthetical references, with two differences: (1) Use a comma followed by one space after the name (or title); (2) use the abbreviation par. for a reference to one paragraph or pars. for a reference to more than one paragraph, followed by the number(s) of the paragraph(s) you are citing; (3) use screen or screens; and (4) use sec. or secs. for sections(s).

Artists seem to be haunted by the fear that psychoanalysis might destroy creativity while it reconstructs personality (Francis, pars. 22-25).
20. Citing an Electronic Source Without Page or Paragraph Numbers—MLA

Many online sources do not number pages or paragraphs. Simply refer to those works in their entirety. Here are two examples referring to “What Is Artificial Intelligence?” by John McCarthy, a Web site without page numbers or paragraph numbers. Although either citation is acceptable, try to include the name of the author in your sentence.

The science of artificial intelligence includes efforts beyond trying to simulate human intelligence (McCarthy).

John McCarthy notes that the science of artificial intelligence includes efforts beyond trying to simulate human intelligence.

How do I compile an MLA-style works cited list?

In MLA style, Works Cited pages give complete bibliographic information for each source used in a research paper. This Works Cited list includes only the sources from which you QUOTE or PARAPHRASE or SUMMARIZE. Never include sources that you have consulted but do not refer to in the paper. Box 33-1 gives general information about a Works Cited list, and the rest of this chapter provides models of specific kinds of Works Cited entries.

Guidelines for an MLA-style Works Cited list

- TITLE
  Works Cited

- PLACEMENT OF LIST
  Start a new page numbered sequentially with the rest of the paper (following the Notes pages if any).

- CONTENT AND FORMAT
  Include all sources quoted from, paraphrased, or summarized in your paper. Start each entry on a new line and at the regular left margin. If the entry uses more than one line, indent the second and all other lines one-half inch or five spaces from the left margin. Double-space all lines.

- SPACING AFTER PUNCTUATION
  When typewriters were common, it improved readability to leave two spaces after punctuation at the end of a sentence. Computers have made this practice no longer necessary. The MLA Handbook uses one space but says that it is perfectly acceptable to use two. Always put only one space after a comma or a colon.
ARRANGEMENT OF ENTRIES
Alphabetize by author's last name. If no author is named, alphabetize by the title's first significant word (not A, An, or The).

AUTHORS' NAMES
Use first names and middle names or middle initials, if any, as given in the source. Do not reduce to initials any name that is given in full. For one author or the first-named author in multiauthor works, give the last name first. Use the word and with two or more authors. List multiple authors in the order given in the source. Use a comma between the first author's last and first names and after each complete author name except the last. After the last author's name, use a period: Fein, Ethel Andrea, Bert Griggs, and Delaware Rogash.

Include Jr, Sr, II, or III, but do not include other titles or degrees before or after a name. For example, an entry for a work by Edward Meep III, MD, and Sir Richard Bolton would start like this: Meep, Edward III, and Richard Bolton.

CAPITALIZATION OF TITLES
Capitalize all major words and the first and last words of all titles and subtitles. Do not capitalize articles (a, an, the), prepositions, coordinating conjunctions, or to in infinitives in the middle of a title.

SPECIAL TREATMENT OF TITLES
Use quotation marks around titles of shorter works (poems, short stories, essays, articles). Underline titles of longer works (books, periodicals, plays).

For underlining, use an unbroken line like this. The MLA Handbook for Writers of Research Papers (6th ed., 2003) prefers underlined roman type to italic type, so underline unless your instructor specifically requests italics.

When a book title includes the title of another work that is usually underlined (as with a novel, play, or long poem), the preferred MLA style is not to underline the incorporated title: Decoding Jane Eyre. For an alternative style MLA accepts, see item 20 in 33d.1.

If the incorporated title is usually enclosed in quotation marks (as with a short story or short poem), keep the quotation marks and underline the complete title of the book, including the final punctuation. This is the only case in which final punctuation is underlined in MLA style: Theme and Form in "I Shall Laugh Purely" by Robinson Jeffers.

Drop A, An, or The as the first word of a periodical title.
Guidelines for an MLA-style Works Cited list (continued)

- **PLACE OF PUBLICATION**
  If several cities are listed for the place of publication, give only the first. MLA doesn’t permit US state names no matter how obscure or confusing the city names might be. For an unfamiliar city outside the United States include an abbreviated name of the Canadian province or the country.

- **PUBLISHER**
  Use shortened names as long as they are clear: *Prentice* for *Prentice Hall*, *Simon* for *Simon & Schuster*. For university presses, use the capital letters *U* and *P* (without periods): *Oxford UP; U of Chicago P.*

- **PUBLICATION DATE, MONTH, AND YEAR**
  The date precedes the month and year: 25 July 2005. Abbreviate all publication months except *May, June, and July*. Use the first three letters followed by a period (*Dec., Feb.*) except *September* (*Sept.*).

- **PARAGRAPH AND SCREEN NUMBERS IN ELECTRONIC SOURCES**
  Some electronic sources number paragraphs or screens instead of pages, although most electronic sources include no such information. If paragraphs are numbered, at the end of the publication information give the total number of paragraphs followed by the abbreviation *pars.*: 77 pars. If screens are numbered, give the total number of screens as the final information in the entry. If the source does not number paragraphs or screens, include whatever identifiable information is provided.

- **PAGE RANGES**
  Give the page range—the starting page number and the ending page number, connected by a hyphen—of any paginated electronic source and any paginated print source that is part of a longer work (for example, a chapter in a book, an article in a journal). A range indicates that the cited work is on those pages and all pages in between. If that is not the case, use the style shown next for discontinuous pages. In either case, use numerals only, without the word *page* or *pages* or the abbreviation *p.* or *pp.*

  Use the full second number through 99. Above that, use only the last two digits for the second number unless it would be unclear: 113–14 is clear, but 567–602 requires full numbers.

- **DISCONTINUOUS PAGES**
  Use the starting page number followed by a plus sign (+): 32+.
How do I compile an MLA-style works cited list?

33d.1 Following MLA guidelines for specific sources in a Works Cited list

The directory below corresponds to the numbered examples that follow it. Not every possible documentation model is shown here. You may find that you have to combine features of models to document a particular source.

Directory—MLA Style

PRINT SOURCES

1. Book by One Author—MLA
2. Book by Two or Three Authors—MLA
3. Book by More Than Three Authors—MLA
4. Two or More Works by the Same Author(s)—MLA
5. Book by Group or Corporate Author—MLA
6. Book with No Author Named—MLA
7. Book with an Author and an Editor—MLA
8. Translation—MLA
9. Work in Several Volumes or Parts—MLA
10. One Selection from an Anthology or an Edited Book—MLA
11. More Than One Selection from the Same Anthology or Edited Book—MLA
12. Signed Article in a Reference Book—MLA
13. Unsigned Article in a Reference Book—MLA
14. Second or Later Edition—MLA
15. Anthology or Edited Book—MLA
16. Introduction, Preface, Foreword, or Afterword—MLA
17. Unpublished Dissertation or Essay—MLA
18. Reprint of an Older Book—MLA
19. Book in a Series—MLA
20. Book with a Title Within a Title—MLA
21. Bible or Sacred Texts—MLA
22. Government Publication—MLA
23. Published Proceedings of a Conference—MLA
24. Signed Article in a Daily Newspaper—MLA
25. Editorial, Letter to the Editor, or Review—MLA
26. Unsigned Article in a Daily Newspaper—MLA
27. Signed Article in a Weekly or Biweekly Periodical—MLA
28. Signed Article in a Monthly or Bimonthly Periodical—MLA
29. Unsigned Article in a Periodical—MLA
30. Article in a Collection of Reprinted Articles—MLA
MLA DOCUMENTATION WITH CASE STUDY

31. Article in a Looseleaf Collection of Reprinted Articles—MLA
32. Article in a Journal with Continuous Pagination—MLA
33. Article in a Journal That Pages Each Issue Separately—MLA
34. Abstract in a Collection of Abstracts—MLA

MISCELLANEOUS PRINT AND NONPRINT SOURCES
35. Published or Unpublished Letters—MLA
36. Map or Chart—MLA
37. Report or Pamphlet—MLA
38. Legal Source—MLA
39. Interview—MLA
40. Lecture, Speech, or Address—MLA
41. Film, Videotape, or DVD—MLA
42. Musical Recording—MLA
43. Live Performance—MLA
44. Work of Art, Photograph, or Musical Composition—MLA
45. Image or Photograph in a Print Publication—MLA
46. Television or Radio Program—MLA
47. Microfiche Collection of Articles—MLA
48. Advertisement—MLA

ELECTRONIC SOURCES FROM DATABASES OR SUBSCRIPTION SERVICES
49. Subscription Service Access: Article with a Print Version—MLA
50. Subscription Service Access: Abstract with a Print Version—MLA
51. Subscription Service Access: Material with No Print Version—MLA
52. Subscription Service Access with a Keyword: Article from a Periodical with a Print Version—MLA
53. Subscription Service Access Showing a Path—MLA

SOURCES FROM INTERNET SITES
54. Online Book—MLA
55. Online Book in a Scholarly Project—MLA
56. Online Government-Published Books—MLA
57. Articles in Online Periodicals—MLA
58. Personal Home Page—MLA
59. Entire Internet Site—MLA
60. Academic Department Home Page—MLA
61. Course Home Page—MLA
62. Government or Institutional Web Site—MLA
How do I compile an MLA-style works cited list?

63. Online Poem—MLA
64. Online Work of Art—MLA
65. Online Image or Photograph—MLA
66. Online Interview—MLA
67. Online Film or Film Clip—MLA
68. Online Cartoon—MLA
69. Online Television or Radio Program—MLA
70. Online Discussion Posting—MLA
71. Real-Time Communication—MLA
72. E-Mail Message—MLA
73. Part of an Online Book—MLA
74. Signed Article in an Online Newspaper or News Site—MLA
75. Anonymous Online Article—MLA
76. Online Review—MLA
77. Online Abstract—MLA
78. Online Editorial—MLA
79. Online Letter to the Editor—MLA
80. Posting on a Blog—MLA
81. Electronic Sound Recording or Sound Clip—MLA
82. Online Advertisement—MLA
83. Online Manuscript or Working Paper—MLA

OTHER ELECTRONIC SOURCES
84. Nonperiodical Publication on CD, DVD, or Magnetic Tapes—MLA
85. Video Game or Software—MLA
86. CD-ROM Database: Abstract with a Print Version—MLA
87. CD-ROM: Article from a Periodical with a Print Version—MLA
88. CD-ROM: Selection from a Book with a Print Version—MLA
89. CD-ROM: Material with No Print Version—MLA
90. Work in More Than One Publication Medium—MLA

Print Sources

1. Book by One Author—MLA

2. Book by Two or Three Authors—MLA
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3. Book by More Than Three Authors—MLA

Give only the first author's name, followed by a comma and the phrase *et al.* ("and others"). Otherwise, you must list all authors.


4. Two or More Works by the Same Author(s)—MLA


Give author name(s) in the first entry only. In the second and subsequent entries, use three hyphens and a period to stand for exactly the same name(s). If the person served as editor or translator, put a comma and the appropriate abbreviation (ed. or trans.) following the three hyphens. Arrange the works in alphabetical (not chronological) order according to book title, ignoring labels such as ed. or trans.

5. Book by Group or Corporate Author—MLA

Cite the full name of the corporate author first, omitting A, An, or The. When a corporate author is also the publisher, use a shortened form of the corporate name at the publisher position.


6. Book with No Author Named—MLA

If there is no author's name on the title page, begin the citation with the title. Alphabetize the entry according to the first significant word of the title (ignore A, An or The).


7. Book with an Author and an Editor—MLA

If your paper refers to the work of the book’s author, put the author’s name first; if your paper refers to the work of the editor, put the editor’s name first.


8. Translation—MLA

How do I compile an MLA-style works cited list?

9. Work in Several Volumes or Parts—MLA

If you are citing only one volume, put the volume number before the publication information. If you wish, you can give the total number of volumes at the end of the entry. MLA recommends using arabic numerals, even if the source uses roman numerals (Vol. 6 rather than Vol. VI).


10. One Selection from an Anthology or an Edited Book—MLA

Give the author and title of the selection first and then the full title of the anthology. Information about the editor starts with Ed. (for “Edited by”), so do not use Eds. when there is more than one editor. Give the name(s) of the editor(s) in normal first name, second name order rather than reversing first and last names. Give the page range at the end.


11. More Than One Selection from the Same Anthology or Edited Book—MLA

If you cite more than one selection from the same anthology, you can list the anthology as a separate entry with all the publication information. Also, list each selection from the anthology by author and title of the selection, but give only the name(s) of the editor(s) of the anthology and the page number(s) for each selection. Here, ed. stands for “editor,” so it is correct to use eds. when more than one editor is named. List selections separately in alphabetical order by author’s last name.


Kingston, Maxine Hong. “No Name Woman.” Gilbert and Gubar 2337-47.


12. Signed Article in a Reference Book—MLA

A “signed article” means that the author of the article is identified. If the articles in the book are alphabetically arranged, omit volume and page numbers. If the reference book is frequently revised, give only the edition and year of publication.

13. Unsigned Article in a Reference Book—MLA

If you are citing a widely used reference work, do not give full publication information. Instead, give only the edition and year of publication.


14. Second or Later Edition—MLA

If a book is not a first edition, the edition number appears on the title page. Place the abbreviated information (*2nd ed.*, *3rd ed.*, etc.) between the title and the publication information. Give only the latest copyright date for the edition you are using.


15. Anthology or Edited Book—MLA

The abbreviation *ed.* stands for “editor,” so use *eds.* when more than one editor is named; also see items 10 and 11 in 33d.1.


16. Introduction, Preface, Foreword, or Afterword—MLA

Give first the name of the writer of the part you are citing, then the name of the cited part, capitalized but not underlined or in quotation marks. After the book title, write *By* and the book author’s full name, if different from the writer of the cited material. If the writer of the cited material is the same as the book author, include only the last name after *By*. Following the publication information, give inclusive page numbers for the cited part, using roman or arabic numerals as the source does.


When the introduction, preface, foreword, or afterword has a title (as below), include it in the citation before the section name.


17. Unpublished Dissertation or Essay—MLA

State the author’s name first, then the title in quotation marks (not underlined), then a descriptive label (such as *Diss.* or *Unpublished essay*), followed by the degree-granting institution (for dissertations), and, finally, the date.

How do I compile an MLA-style works cited list?

18. Reprint of an Older Book—MLA
Republishing information can be found on the copyright page. Give the date of the original version before the publication information for the version you are citing.


19. Book in a Series—MLA

20. Book with a Title Within a Title—MLA
The MLA recognizes two distinct styles for handling normally independent titles when they appear within an underlined title. In the MLAs preferred style, the embedded title should not be underlined or set within quotation marks.


However, the MLA now accepts a second style for handling such embedded titles. In the alternative form, the normally independent titles should be set within quotation marks, and they should be underlined.


Use whichever style your instructor prefers.

21. Bible or Sacred Texts—MLA

22. Government Publication—MLA
For government publications that name no author, start with the name of the government or government body. Then, name the government agency. *GPO* is a standard abbreviation for *Government Printing Office*, the publisher of most US government publications.

MLA DOCUMENTATION WITH CASE STUDY

23. Published Proceedings of a Conference—MLA


24. Signed Article in a Daily Newspaper—MLA

Omit A, An or The as the first word in a newspaper title. Give the day, month, and year of the issue (and the edition, if applicable). If sections are designated, give the section letter as well as the page number. If an article runs on non-consecutive pages, give the starting page number followed by a plus sign (for example, 23+ for an article that starts on page 23 and continues on page 42).


25. Editorial, Letter to the Editor, or Review—MLA


26. Unsigned Article in a Daily Newspaper—MLA


If the city of publication is not part of the title, put it in square brackets after the title, not underlined.


27. Signed Article in a Weekly or Biweekly Periodical—MLA


28. Signed Article in a Monthly or Bimonthly Periodical—MLA


29. Unsigned Article in a Periodical—MLA

How do I compile an MLA-style works cited list?

30. Article in a Collection of Reprinted Articles—MLA


31. Article in a Looseleaf Collection of Reprinted Articles—MLA

Give the citation for the original publication first, followed by the citation for the collection.


32. Article in a Journal with Continuous Pagination—MLA

If the first issue of a journal with continuous pagination ends on page 128, the second issue starts with page 129. Give only the volume number before the year. Use arabic numerals for all numbers.


33. Article in a Journal That Pages Each Issue Separately—MLA

When each issue begins with page 1, give both the volume number (26) and the issue number (3), separated by a period.


34. Abstract in a Collection of Abstracts—MLA

To cite an abstract, first give information for the full work: the author’s name, the title of the article, and publication information about the full article. If a reader could not know that the cited material is an abstract, write the word Abstract, not underlined, followed by a period. Give publication information about the collection of abstracts. For abstracts identified by item numbers rather than page numbers, use the word item before the item number.
MLA DOCUMENTATION WITH CASE STUDY


**Miscellaneous Print and Nonprint Sources**

35. Published or Unpublished Letter—MLA

Begin entry with the author of the letter. Note the recipient, too.


36. Map or Chart—MLA


37. Report or Pamphlet—MLA

Use the format for books, to the extent possible.


38. Legal Source—MLA

Include the name of the case, the number of the case (preceded by *No.*), the name of the court deciding the case, and the date of the decision.


39. Interview—MLA

Note the type of interview, for example “Telephone” or “Personal” (face-to-face). For a published interview, give the name of the interviewed person first, identify the source as an interview, and then give details as for any published source: title; author, preceded by the word *By*; and publication details.

Friedman, Randi. Telephone interview. 30 June 2005.

40. Lecture, Speech, or Address—MLA


41. Film, Videotape, or DVD—MLA

Give the title first, and include the director, the distributor, and the year. For older films that were subsequently released on videocassettes or DVDs, provide the original release date of the movie *before* the type of medium. Other information (writer, producer, major actors) is optional but helpful. Put first names first.
How do I compile an MLA-style works cited list?


3. **Musical Recording—MLA**
   
   Put first the name most relevant to what you discuss in your paper (performer, conductor, work performed). Include the recording’s title, the medium for any recording other than a CD (LP, audiocassette), the name of the issuer (Vanguard), and the year.


4. **Live Performance—MLA**


5. **Work of Art, Photograph, or Musical Composition—MLA**

   Cassatt, Mary. *La Toilette*. Art Institute of Chicago.


   Underline any work that has a title, such as an opera, ballet, or a named symphony.

   Schubert, Franz. *Unfinished Symphony*.

   Don’t underline or put in quotation marks music identified only by form, number, and key.

   Schubert, Franz. Symphony no. 8 in B minor.

   If you’re citing a published score, treat it like a book.

6. **Image or Photograph in a Print Publication—MLA**

   To cite an image or a photograph that appears as part of a print publication (perhaps as an illustration for an article), give the photographer (if known), the title or caption of the image, and complete publication information, as for an article. If the image has no title, provide a brief description.

46. Television or Radio Program—MLA

Include at least the title of the program (underlined), the network, the local station and its city, and the date of the broadcast.


For a series, also supply the title of the specific episode (in quotation marks) before the title of the program (underlined) and the title of the series (neither underlined nor in quotation marks).


47. Microfiche Collection of Articles—MLA

A microfiche is a transparent sheet of film (a fiche) with microscopic printing that needs to be read through a special magnifier. Each fiche holds several pages, with each page designated by a grid position. A long document may appear on more than one fiche.


48. Advertisement—MLA


Electronic Sources from Databases or Subscription Services

Online sources fall into two categories: (1) those you access through a DATABASE or online service to which your library subscribes, such EBSCO or FirstSearch, or an online service to which you personally subscribe, such as America Online; and (2) those you access by entering a specific URL (Internet address). For source material reached through a database or subscription service, give

1. information about the source (author, title, print source if any, publication date)
2. the name of the database, underlined
3. the name of the service
4. the name of the library (if you accessed it through a library’s service)
5. the date you accessed the work
How do I compile an MLA-style works cited list?

6. the URL of the service, in angle brackets (if you must break a URL at the end of a line, break only after a slash)
7. a keyword, if you used one.

49. Subscription Service Access: Article with a Print Version—MLA


50. Subscription Service Access: Abstract with a Print Version—MLA


This entry is for the same abstract shown in item 34, but here it is accessed from an online database (*PsycINFO*) by means of a library subscription service. The name of the library shows where the source was accessed, and 10 Apr. 2004 is the date it was accessed. The entry ends with the specific URL used.

51. Subscription Service Access: Material with No Print Version—MLA


52. Subscription Service Access with a Keyword: Article from a Periodical with a Print Version—MLA

Citations for electronic sources that don’t have URLs contain at least six major parts: author, publication information, title of database, publication medium, name of vendor or computer service, and electronic publication date (add access date if different). Electronic versions of sources that also appear in print start with information about the print version.


Information applying to the print version of this article in the *New York Times* ends with Op-ed page, and information about the online version starts with the title of the database, *New York Times Online*. *America Online* is the service through which the database was accessed, and 29 Dec. 2003 is the access date.
date. The keyword nytimes was used to access New York Times Online, as noted after the access date.

53. Subscription Service Access Showing a Path—MLA

When you access a source by choosing a series of keywords, menus, or topics, end the entry with the “path” of words you used. Use semicolons between items in the path, and put a period at the end.


Sources from Internet Sites

This section shows models for online sources accessed through an Internet browser, such as Web sites; FTP and Gopher sites; listservs; discussion groups; and other online sources. For such sources, provide as much of the following information as you can.

1. The author’s name, if given.
2. In quotation marks, the title of a short work (Web page, brief document, essay, article, message, and so on); or underlined, the title of a book.
3. Publication information for any print version, if it exists.
4. The name of an editor, translator, or compiler, if any, with an abbreviation such as Ed., Trans., or Comp. before the name.
5. The underlined title of the Internet site (scholarly project, database, online periodical, professional or personal Web site). If the site has no title, describe it: for example, Home page.
6. The date of electronic publication (including a version number, if any) or posting, or the most recent update.
7. The name of a sponsoring organization, if any.
8. The date you accessed the material.
9. The URL in angle brackets (< >), with a period after the closing bracket. If the URL is too long or complicated, simply use the URL of the site’s search page or of a subscription service, followed by Keyword or Path, and the links you followed. If you must break a URL at the end of a line, break only after a slash.

54. Online Book—MLA


55. Online Book in a Scholarly Project—MLA

How do I compile an MLA-style works cited list?

56. Online Government-Published Books—MLA
Start with the name of the government or government body, and then name the government agency.
MLA also permits an alternative format, with the author's name first, then title, then government body.

57. Articles in Online Periodicals—MLA

58. Personal Home Page—MLA
Give the name of the person who created the page, last name first. Include the page's title, if there is one, underlined; if there is no title, add the description Home page, not underlined, followed by a period. Add the date you accessed the material and conclude with the URL in angle brackets, with a period after the closing bracket.

59. Entire Internet Site—MLA

60. Academic Department Home Page—MLA
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61. Course Home Page—MLA


62. Government or Institutional Web Site—MLA


63. Online Poem—MLA


64. Online Work of Art—MLA

Provide artist, title of work, creation date (optional), the museum or individual who owns it, the place, the access date, and the URL.


In this example, the URL is for the Museum of Modern Art. The keyword Starry Night is what you type into a search box at the museum’s Web site. (The specific URL for the painting is long and complicated.)

65. Online Image or Photograph—MLA

As with images from print publications (see entry 45), include information about the photographer and title, if known. Otherwise, describe the photography briefly and give information about the Web site, the access date, and the URL.


66. Online Interview—MLA


67. Online Film or Film Clip—MLA


68. Online Cartoon—MLA


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How do I compile an MLA-style works cited list?

69. Online Television or Radio Program—MLA


70. Online Discussion Posting—MLA

To cite an online message, give the author's name (if any), the title of the message in quotation marks, and then Online posting. Give the date of the posting and the name of the bulletin board, if any, then the access date and, in angle brackets, the URL.

Firrantello, Larry. “Van Gogh on Prozac.” Online posting. 23 May 2005. Salon Table Talk. 7 June 2005 <http://tabletalk.salon.com/webx?50@931.xC34anLawOq.1@77362ad1>.

Be cautious about using online postings as sources. Some postings contain cutting-edge information from experts, but some contain trash. Unfortunately, there is no way to know whether people online are who they claim to be.

71. Real-Time Communication—MLA

Give the name of the speaker, a title for the event (“Virtual First Year Composition: Distance Education, the Internet, and the World Wide Web”), the forum (DaMOO), date, access date, and URL.


72. E-Mail Message—MLA

Start with the name of the person who wrote the e-mail message. Give the title or subject line in quotation marks. Then describe the source (e-mail) and identify the recipient. End with the date.

Thompson, Jim. “Bob Martin’s Opinions.” E-mail to June Cain. 11 Nov. 2004.

73. Part of an Online Book—MLA


74. Signed Article in an Online Newspaper or New Site—MLA

If the article is signed, begin with the author's name, last name first.


If unsigned, begin with the article title.
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75. Anonymous Online Article—MLA


76. Online Review—MLA


77. Online Abstract—MLA


78. Online Editorial—MLA


79. Online Letter to the Editor—MLA


80. Posting on a Blog—MLA


81. Electronic Sound Recording or Sound Clip—MLA


82. Online Advertisement—MLA

How do I compile an MLA-style works cited list?

83. Online Manuscript or Working Paper—MLA


Other Electronic Sources

84. Nonperiodical Publication on CD, DVD, or Magnetic Tapes—MLA

Citations for publications on DVD, CD-ROM, or other recording formats follow guidelines for print publications, with two additions: list the publication medium (for example, CD), and give the vendor’s name.


85. Video Game or Software—MLA


86. CD-ROM Database: Abstract with a Print Version—MLA


All of the information through item 23878 is for the print version of this source. The volume number is 78, and the abstract’s number is 23878. All of the information from PsycLIT to the end of the entry is for the electronic version of the source. PsycLIT is the name of the CD-ROM database, and SilverPlatter is the name of the producer of the CD-ROM. The CD-ROM was issued in September 1991.

87. CD-ROM: Article from a Periodical with a Print Version—MLA


Information for the print version ends with the article’s page number, 38. The title of the CD-ROM is Time Man of the Year, its producer is the publisher Compact, and its copyright year is 1993. Both the title of the print publication and the title of the CD-ROM are underlined.

88. CD-ROM: Selection from a Book with a Print Version—MLA


Version 2.0 signals that this CD-ROM was updated; the producer changes version numbers rather than giving update dates.
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89. CD-ROM: Material with No Print Version—MLA


90. Work in More Than One Publication Medium—MLA


This book and CD-ROM come together. Each has its own title, but the publication information—Portsmouth: Boynton, 2000—applies to both.

33d.2 Using content or bibliographic notes in MLA style

In MLA style, footnotes or endnotes serve two specific purposes: (1) You can use them for content (ideas and information) that does not fit into your paper but is still worth relating; and (2) you can use them for bibliographic information that would intrude if you were to include it in your text. Place a note number at the end of a sentence, if possible. Put it after any punctuation mark except the dash. Do not put any space before a note number, and put one space after it. Raise the note number a little above the line of words, as shown in the following examples.

**TEXT OF PAPER**

Eudora Welty’s literary biography, One Writer’s Beginnings, shows us how both the inner world of self and the outer world of family and place form a writer’s imagination.¹

**CONTENT NOTE—MLA**

¹ Welty, who valued her privacy, always resisted investigation of her life. However, at the age of seventy-four, she chose to present her own autobiographical reflections in a series of lectures at Harvard University.

**TEXT OF PAPER**

Barbara Randolph believes that enthusiasm is contagious (65).¹ Many psychologists have found that panic, fear, and rage spread more quickly in crowds than positive emotions do, however.

**BIBLIOGRAPHIC NOTE—MLA**

¹ Others who agree with Randolph include Thurman 21, 84, 155; Kelley 421–25; and Brookes 65–76.

33e A student’s MLA-style research paper

Chandra Johnson, a first-year college student, wrote the following research paper in MLA documentation style for her freshman English course. Her instructor asked students to research a current topic that interested them. She
A student’s MLA-style research paper

had always been fascinated by robots in movies and television, so she decided to explore how close their depictions were to reality. Then, she narrowed this broad topic to one that focused more on the role of emotions in artificial intelligence.

She began her research by looking in online databases available through her college library. She searched both popular periodicals and more scientific ones. Because she found so much information, she decided to focus on sources published in the past five years. References in some of those articles led her to scholarly books. She wanted to avoid information that was relatively old so that her material would be as up-to-date as possible. New advances in artificial intelligence were being announced almost weekly. At the same time, she decided that she had to establish a reasonable cut-off date for her information.

Chandra preferred to draft both her outline and her paper at the same time, using each document to refine the other. Her outline helped assure a logical flow to her presentation, and her first draft of the paper helped her discover how she could organize her information. (See Chandra’s outline on the following page.)

Chandra’s instructor gave the option of choosing her outline format. Because a less traditional format allows a writer to plan the content of an essay’s introductory and concluding paragraphs as well as its body, Chandra decided she preferred that format. As you’ll notice in her outline, this format uses the full wording of the thesis statement in the introductory paragraph as well.

Although MLA style doesn’t officially endorse using an outline or any particular outline format, many instructors do assign outlines. Some prefer a less traditional format, such as Chandra’s, while others prefer the standard traditional outline format that we discuss in section 2n. Unless you’re told otherwise, use the traditional format.

OUTLINE FOR CHANDRA JOHNSON’S RESEARCH PAPER

I. Introduction
   A. Example from the movie A.I.
   B. Thesis statement: An unsolved problem is whether computers need emotions for scientists to consider them intelligent.

II. Definitions of intelligence
   A. General definitions
   B. Artificial intelligence (AI)
      1. Qualities of AI
      2. Scientists’ opinions of how close we are to AI
The movie *A.I.: Artificial Intelligence* portrays a future in which distinguishing robots from people is almost impossible. The robots look human and can produce actions that appear to be human. Still, one important distinction exists: Robots lack true emotions. In the film, released in 2001, scientists create an experimental robotic boy who can deeply love the woman who owns him and can believe that she is his mother. Computer scientists, psychologists, and philosophers today disagree.
whether creating artificial beings like this boy should be the ultimate goal of research in artificial intelligence. Indeed, an unsolved problem is whether computers need emotion for scientists to consider them intelligent.

Defining human intelligence is a major focus of cognitive science, a broad field that studies the mind (Pfeifer and Scheier 5). Members of this field, who include psychologists, linguists, and computer scientists, agree that human intelligence encompasses several broad abilities. These consist of the abilities to think abstractly, to learn, to adapt to new situations in life, and to profit from experience (7). Intelligence calls for more than the ability to recall information or perform set routines. It involves using past knowledge, intuition, creativity, and experience in new, unfamiliar situations and learning from them. It also requires using intuition and creativity (10). For example, when college student Joshua Vrana, who worked part-time in a store, was asked to develop a Web site for the store, he created it from his knowledge of Web design, the store, and its customers. In so doing, he drew creatively on his knowledge and experience, thereby using all aspects of human intelligence.

Cognitive scientists disagree on a definition of artificial intelligence. At one extreme are those who regard it as the ability of a machine to perform every intelligent act that a human can perform. Table 1 lists some of those acts. This is a very high standard. At the other extreme are scientists who define artificial intelligence as the ability to perform even a small act that requires human intelligence. For example, the American Association for Artificial Intelligence believes that artificial intelligence already exists in machines as simple as postal machines that can sort handwritten postcards. This is a very low standard.
Although the dream of creating robots with human intelligence has existed for almost a century, scientists disagree on how close we have come to realizing that dream. Perhaps the most famous example occurred when computer engineers developed IBM’s Deep Blue computer, which beat chess grandmaster Garry Kasparov in 1997 (Hayden 46). However, Murray Campbell, one of Deep Blue’s creators, has conceded that the computer “did not exhibit human qualities and therefore was not ‘intelligent’” (qtd. in Stix). Some computer scientists take a much different position. For example, Hans Moravec believes that “robot computers [will] achieve human intelligence . . . around 2040” (qtd. in Miner 9).
Ray Kurzweil is even more optimistic in that he believes that Moravec’s prediction will come true as early as 2029 and that by the end of the twenty-first century, machine-based intelligences will rightfully claim to be human (21). Finally, Doug Lenat, who has spent twenty-two years developing a system called Cyc (pronounced “psych”), asserts that Cyc will be as smart as humans “in less than ten years” (qtd. in Mullins).

How would we decide whether Lenat’s prediction came true? The Turing test, developed in 1950 by the British mathematician Alan Turing, is one commonly accepted measure of artificial intelligence (McCarthy). A researcher sits in one room, another person in a second room, and a computer in a third room. The researcher does not know whether a person or a computer is in each room. Communicating only through a keyboard and screen, the researcher asks the same questions of both the person and the machine. If the computer answers and the researcher cannot tell whether the response comes from a machine, the computer passes the test.

However, some people dispute the Turing test. The prominent philosopher John Searle argues that the appearance of proper answers does not prove the existence of intelligence. He offers “the chess room argument.”

Imagine that a man who does not know how to play chess is locked inside a room, and there he is given a set of, to him, meaningless symbols. Unknown to him, these represent positions on a chessboard. He looks up in a book what he is supposed to do, and he passes back more meaningless symbols. We can suppose that if the rule book...is skillfully written, he will win chess games. People outside the room
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will say, “This man understands chess, and in fact he is a good chess player because he wins.” They will be totally mistaken. The man understands nothing of chess; he is just a computer. (qtd. in Allen 30)

The disagreements about defining artificial intelligence result partly from how complicated the idea of human intelligence has become. Between 1980 and 1996, Howard Gardner, a well-respected researcher in psychology at Harvard University, defined seven distinctive categories of human intelligence. Those categories are linguistic, mathematical, spatial, kinesthetic, musical, interpersonal, and intrapersonal intelligence (Goleman 38). In 1996, Gardner added an eighth intelligence: naturalistic. He calls this eight-item list of abilities “multiple intelligences.” Gardner believes that every person is born possessing a combination of all eight intelligences (qtd. in Hoerr).

Daniel Goleman, another highly regarded researcher in psychology, groups the concepts of intrapersonal and interpersonal intelligence under the label “emotional intelligence.” Goleman says that emotional intelligence involves more than having traditional feelings of anger, sadness, fear, enjoyment, love, surprise, disgust, or shame (289-90). It determines how well people do in life (28). A study of high school valedictorians, for example, shows that they frequently have less successful careers than classmates who excel at interpersonal or emotional skills (35). Goleman assigns five aspects to emotional intelligence: “knowing one’s emotions,” “managing emotions,” “motivating oneself,” “handling relationships,” and “recognizing emotions in others” (43). The last of these is crucial in the context of artificial intelligence because it determines how people respond to other people and, in turn, how the other people respond back.
The neurologist Antonio Damasio explains that scientists and philosophers historically dismissed the significance of emotions (38). Traditionally, they associated logic and reason with intelligence. Early scientists and philosophers believed emotion belonged to the body, not the mind (39).

The character of Mr. Spock in the original Star Trek television series represents this belief. Incapable of emotion, Spock is flawlessly logical. Certainly, everyone would agree that he is intelligent.

However, Damasio would be unconvinced by the claim that Spock is intelligent—and not just because Spock is a Vulcan. Damasio conducted numerous experiments with people who lost various emotions through brain injuries. These people otherwise seemed to possess all their reasoning and logical abilities, but they had trouble making logical decisions. The experiments led Damasio to conclude that “emotion is integral to the process of reasoning and decision making” (41). He tells of a patient, David, who suffered a disease that destroyed parts of his brain and left him unable to learn any new fact, to recognize any new person, or to remember recent events or people he had just met. Damasio and his colleagues performed an experiment in which one person treated David rudely and another person treated him well for a period of five days. Although David could not remember details of how these people treated him, he behaved differently in the presence of the two people. Clearly, he had learned on an emotional level, which made him respond sensibly (43–47).

The strongest believers in artificial intelligence mostly downplay the role of emotions, maintaining that only logic and reason define intelligence. Others give a qualified yes to “the provocative question whether robots will in fact need to have
emotions, similar to the way humans have emotions” (Pfeifer and Scheier 642). Doubters, however, point to emotions, feelings, and intuition as the main barriers to artificial intelligence. The ability to write fiction, for example, depends on feelings that computers can never experience. One skeptic even asserts that computers have “inner lives on a par with rocks” (Bringsjord 33). Programmers design computer programs to be efficient and to sort problems into separate steps, ignoring everything that is not part of those steps. In contrast, part of being human is getting bored, angry, or off the subject. John Searle believes that cognitive scientists make a terrible mistake when they imagine that the brain works the same way that computers do (qtd. in Allen 30).

Recognizing that the brain does not function through logic alone, some researchers are now studying how humans learn and are trying to incorporate their discoveries into computers. For example, children learn mainly by interacting in social situations with others. Emotions play a large role in those situations ("Sociable" 1). As an illustration, a baby learns that smiling causes adults to pay more attention to her, so she smiles a lot. In contrast, a two-year-old learns to recognize when someone is angry and to avoid that person. A child’s growth in emotional intelligence would be hard to build into a computer. Nonetheless, Donald Norman and his colleagues believe that understanding how emotions combine with cognition in humans is vital to developing computer systems that can function by themselves (38). In fact, scientists at Vanderbilt University have built robots that recognize some basic human emotions (Johnson).

Programming robots so that they can express as well as sense emotions is important, because people’s abilities to convey
emotions affect the responses that they get from others. To try to learn how inanimate objects suggest emotions, scientists have studied some unlikely sources. One group of researchers analyzed how Disney animators created “the illusion of life” by seeming to give cartoon characters emotions (Bates 122).

Using Disney techniques, scientists created computer “creatures” that seemed to display emotions in response to simple situations (123). Further work led to robots that appeared more humanlike. For example, scientists gave a robot named Kismet appealing, childlike features. Kismet’s “features, behavior, and ‘emotions’” seem to allow the robot to “interact with humans in an intuitive, natural way” (“Sociable” 1).

Unlike sophisticated robots, such as Honda’s walking ASIMO, whose builders emphasized what Gardner would call kinesthetic intelligence, Kismet emphasizes intrapersonal intelligence. Nevertheless, creating the appearance of emotions is much different from creating the existence of emotions. Sidney Perkowitz maintains that robots like Kismet are “a far cry from . . . that sense of selfhood” that defines consciousness (197). Still, other researchers hold a different standard. While they agree that designers should “include an emotional component in an intelligent system to make it more human,” they suggest that seeming emotional is important only for interacting with humans (Martinez-Miranda and Aldea 329–30). They claim that emotions do not make computers more intelligent.

Do computers need emotions for scientists to consider them intelligent? This question remains unanswered and controversial. As Sam Williams notes, “The current tension over artificial intelligence is a reflection of our own society’s tension over the future and what it holds” (xvi). Computers can indeed do some things that resemble a few kinds of intelligence that
humans possess, and that is enough to satisfy some scientists. However, Gardner, Goleman, Damasio, Pfeifer and Scheier, and others regard emotions as a crucial part of human intelligence. At present, computers lack anything like the kinds of emotions found in human beings, and scholars like John Searle doubt that computers will ever have them. Clearly, robots like the little boy in A.I. exist only in movies. The possibility of creating real robots similar to him remains only in the very distant future, if at all.

Works Cited