



Handbook *for* Students

Ethics and Original Research

Table of Contents

- 1 Introduction: Academic Integrity at the University of Pennsylvania
- 2 Code of Academic Integrity
- 3 Violations of Academic Integrity: What are the Consequences?
- 3 Doing Original Work at the University of Pennsylvania
- 4 Avoiding Plagiarism: Citing Sources
- 5 Using the Internet
- 7 Citing Electronic Sources
- 8 Avoiding Plagiarism: Quoting
- 9 Avoiding Plagiarism: Paraphrasing
- 11 Avoiding Plagiarism: Summarizing
- 11 Choosing Whether to Quote or to Paraphrase
- 12 Avoiding Plagiarism: Citing Facts and Statistics.
- 13 Avoiding Plagiarism: Writing Computer Code
- 14 Test: What is Common Knowledge?
- 14 Collaboration
- 15 Good Work Habits: Study, Research and Writing
- 17 Style Guides

CREDITS

Written by Patricia Brennecke, Lecturer in English Language Studies.

Edited by Professor Margery Resnick, Chair of the Committee on Discipline, and Joanne Straggas, Office of the Dean for Undergraduate Education. Prepared with the support of Professor Robert P. Redwine, Dean for Undergraduate Education at MIT.

This publication has been adapted from one produced at MIT entitled, *Academic Integrity at the Massachusetts Institute of Technology: A Handbook for Students*. We are grateful for their permission to use and revise the work for students on our campus.

Produced by
Office of the Provost
University of Pennsylvania
Fall 2006

INTRODUCTION: Academic Integrity at the University of Pennsylvania

You are a student at Penn because of your demonstrated intellectual ability and because of your potential to make a significant contribution to your area of study. In your time at Penn, you will have many opportunities to conduct research and produce scholarship. You will also face many challenges, both in completing your own work and in engaging honestly with the work of others.

Penn aims to graduate students who can communicate their expertise. Many of your assignments will require writing or oral presentations. Most will require research in libraries and laboratories and accessing electronic resources.

Penn anticipates that you will pursue your studies with purpose and integrity. Honesty is what makes scholarship possible in any academic discipline. Penn's expectations of all members of the community, faculty and students alike, are made clear in the Code of Academic Integrity (on the following page). This code prohibits acts of academic dishonesty that include cheating, plagiarism, fabrication, multiple submission, misrepresentation of academic records, facilitating academic dishonesty and gaining unfair advantage in an academic exercise.

Some of you may be coming from educational systems where rules of academic integrity were not clearly defined or enforced. Others may be studying in the United States for the first time. To ensure that all Penn students understand the high academic standards of the University, we publish this handbook to guide you as you approach the research and writing tasks that your courses or your dissertation will demand of you.

This handbook outlines important information you will need to know about correctly acknowledging your sources when you write a report, research paper, critical essay, or position paper. It also provides guidelines for collaboration on assignments. It does not address all issues related to integrity in your work at Penn, as some of these are field-specific.

This manual is focused primarily on integrity in the preparation of original scholarly texts. A detailed treatment of ethical conduct in the gathering, processing and publication scientific data from the laboratory or field is beyond its scope. This subject is covered in detail for the medical and life sciences in the bioethics training materials assembled for students in Penn's Biomedical Graduate Studies program. These materials, which feature a case study approach and cover topics such as integrity in data recording and analysis, ethical treatment of human and animal subjects, authorship and scientific conflict of interest, are available to the Penn community at <http://www.med.upenn.edu/bgs/bioethics.shtml>. At a conceptual level, many of the case studies in this training program would be applicable to the physical sciences as well.

In general, your instructor, research supervisor, and department are important sources of information regarding field-specific practices, and you should consult them at every opportunity.

You should note that this handbook provides information about what constitutes violations of academic integrity. Please familiarize yourself with this material before you begin work in your classes at Penn. Use it as a resource when you have questions, during your time here and beyond.

University of Pennsylvania's Code of Academic Integrity

Since the University is an academic community, its fundamental purpose is the pursuit of knowledge. Essential to the success of this educational mission is a commitment to the principles of academic integrity. Every member of the University community is responsible for upholding the highest standards of honesty at all times. Students, as members of the community, are also responsible for adhering to the principles and spirit of the following Code of Academic Integrity.*

Academic Dishonesty Definitions

Activities that have the effect or intention of interfering with education, pursuit of knowledge, or fair evaluation of a student's performance are prohibited. Examples of such activities include but are not limited to the following definitions:

- A. Cheating: using or attempting to use unauthorized assistance, material, or study aids in examinations or other academic work or preventing, or attempting to prevent, another from using authorized assistance, material, or study aids. Example: using a cheat sheet in a quiz or exam, altering a graded exam and resubmitting it for a better grade, etc.
- B. Plagiarism: using the ideas, data, or language of another without specific or proper acknowledgment. Example: copying another person's paper, article, or computer work and submitting it for an assignment, cloning someone else's ideas without attribution, failing to use quotation marks where appropriate, etc.
- C. Fabrication: submitting contrived or altered information in any academic exercise. Example: making up data for an experiment,

fudging data, citing nonexistent articles, contriving sources, etc.

- D. Multiple submissions: submitting, without prior permission, any work submitted to fulfill another academic requirement.
- E. Misrepresentation of academic records: misrepresenting or tampering with or attempting to tamper with any portion of a student's transcripts or academic record, either before or after coming to the University of Pennsylvania. Example: forging a change of grade slip, tampering with computer records, falsifying academic information on one's resume, etc.
- F. Facilitating academic dishonesty: knowingly helping or attempting to help another violate any provision of the Code. Example: working together on a take-home exam, etc.
- G. Unfair advantage: attempting to gain unauthorized advantage over fellow students in an academic exercise. Example: gaining or providing unauthorized access to examination materials, obstructing or interfering with another student's efforts in an academic exercise, lying about a need for an extension for an exam or paper, continuing to write even when time is up during an exam, destroying or keeping library materials for one's own use., etc.

** If a student is unsure whether his action(s) constitute a violation of the Code of Academic Integrity, then it is that student's responsibility to consult with the instructor to clarify any ambiguities.*

Violations of Academic Integrity: What are the Consequences?

Students caught plagiarizing face academic and disciplinary consequences. For example, an undergraduate student may receive a failing grade from an instructor, or the case may be referred to the Office of Student Conduct for a hearing and sanctions. Sanctions imposed by the Office of Student Conduct become a part of the student's permanent record and may have an adverse impact on future academic and career goals.

At the graduate level, violations of academic integrity are treated very seriously and may result in expulsion from the University. In the case of graduates, discovery of plagiarism in a dissertation can, and has, resulted in the revocation of the Ph.D. degree.

Several of Penn's schools have adopted their own policies for handling academic integrity matters; Law, Medicine, Dental Medicine, Veterinary Medicine, and Wharton Graduate Division each have their own policies. Where there is no separate school policy, the University's Charter of the Student Disciplinary System applies.

The procedure for disciplinary action outlined in the University's Charter of the Student Disciplinary System may be found on the web at <http://www.upenn.edu/oscloutline.htm>

Doing Original Work at the University of Pennsylvania

During your academic life at Penn, you will be asked to do assignments that require research and experimentation. You will also be asked to solve science and math problems that require original thinking. In some classes, you will be required to write papers for which you will need to do research in books, journals, electronic media, and other sources.

One of the challenges of good scholarship is to take what has already been done, said, or argued, and incorporate it into your work in an original way. To some students, this task may seem unnecessarily redundant: a student writing a paper on the benefits of stem cell research may ask, "If the positive aspects of this research have already been argued, why do I need to do it again?" The answer is that

- Your way of presenting the information and arguing it will be different from that of others and is therefore valuable; and
- As more recent information on your subject becomes available, you have the opportunity to bring this information into your report or argument, adding new dimensions to the discussion.

Adapted from:
Avoiding plagiarism.
Purdue University OWL
Online Writing Lab.
Retrieved May 31, 2005
from http://owl.english.purdue.edu/handouts/research/r_plagiar.html

Sometimes the goals of academic writing may seem contradictory.

We ask you to

Read what is written on a topic and report it, demonstrating you have done your research,

BUT write about the topic in an original way.

Bring in opinions of experts and authorities,

BUT do more than simply report them; comment on these opinions, add to them, agree or disagree with them.

Notice articulate phrasing and learn from it, especially if you are trying to enhance your capability in English,

BUT use your own words and/or quote directly or paraphrase accurately when you incorporate this into a paper.

Academic writing is a challenge. It demands that you build on work done by others but create something original from it. The foundation of good academic work – in research and in writing – is honesty. By acknowledging where you have used the ideas, work, or words of others, you maintain your academic integrity and uphold the standards of the University and of the discipline in which you work.

paper without using quotation marks as long as the writer shows where they came from. This is not acceptable in North American culture.

In our academic culture, we consider our words and ideas intellectual property. We believe our words, like a car or any other possession, belong to us and cannot be used by others without acknowledgment. If you copy, borrow, or appropriate another's work and present it as your own in a paper or oral presentation - deliberately or by accident - this act is considered plagiarism.

Avoiding Plagiarism: Citing Sources

During your academic career at Penn, you will write original papers and give oral presentations that require research. It is important to understand that notions concerning intellectual property vary from culture to culture. In some cultures, the concept of owning words and ideas may seem strange. Students from these cultures may have been encouraged to repeat the words of others and incorporate them into their own writing without quoting or otherwise indicating that they came from another source. Other cultures accept the practice of copying phrases or sentences into a

What is plagiarism?

Plagiarism occurs when you use another's words, ideas, assertions, data, or figures and do not acknowledge that you have done so. In simple terms, plagiarism is a form of theft.

If you use the words, ideas, or phrasing of another person or from published material, you must

- Use quotation marks around the words and cite the source.
- Alternatively, you may paraphrase or summarize acceptably and cite the source.

If you use charts, graphs, data sets, or numerical information obtained from another person or from published material, you must also cite the source.

Whether you quote directly or paraphrase the information, you must acknowledge your sources by citing them. In this way, you have the right to use another's words by giving that person credit for the work he or she has done.

What does it mean to “cite” a source?

In writing a paper, it means:

- Showing, in the body of your paper, where the words or information came from, using an appropriate format, and
- Providing complete information about the source (author, title, date, etc.) using an appropriate format, in a bibliography or footnote.

In giving a formal presentation, it means:
Acknowledging, on your slide, where the graph, chart or other information came from.

Why should I cite my sources?

- To show your readers that you have done your research.
- To give credit to others for work they have done.
- To point your readers to sources that may be useful to them.
- To allow your readers to check your sources, if there are questions.

Citing your sources points the way for other scholars. You may cite a source that is of particular interest to a reader who wants to read more on your subject. Your citation will help that reader locate the information quickly.

What should I cite?

- **Print sources:** books, journal articles, magazine articles, newspapers - any material published on paper.
- **Electronic sources:** web pages, articles from online newspapers and journals, articles retrieved from databases like LexisNexis and ProQuest, government documents, newsgroup postings, graphics, e-mail messages, and web logs (i.e., any material published or made available on the Internet).
- **Recorded material:** television or radio programs, films, filmed discussions, panels, seminars, interviews, or public speeches.
- **Spoken material:** personal conversations, interviews, information obtained in lectures, poster sessions, or scholarly presentations of any kind.
- **Images:** charts, graphs, tables, data, illustrations, architectural plans, and photographs.

Using the Internet: A Special Note

The Internet has made academic research much easier than it used to be. Databases have been created that compile much of the published material relevant to a certain field, saving you valuable time. You can download .pdf files or have articles sent to you by email.

Yet the Internet poses special problems. Because it is relatively new and because so much of what appears on the Internet does not indicate the author's name, people tend to think the information they find there is “free” and open for the taking. Everything on the Internet has been written by someone. The author may be an organization or an individual, but there is an author – or at least, a traceable source.

This source is often found in the heading at the top of the web page or its sponsoring organization, such as The World Health Organization or The United Nations. If no traceable source exists – i.e., you cannot identify an author or a sponsoring organization whose reliability you can check – then you must be careful. The information may be merely someone’s opinion, not verified by facts or evidence, and you should not use it. Mechanisms for peer review of materials on the internet are not well established as yet and are far from uniform.

Students commonly use the Internet to access the following:

- Articles originally published in print media that are now available online through subscription services like LexisNexis or Pro Quest
- Articles published in online journals or newspapers
- Web pages or web sites sponsored by reliable institutions

Treat the information you find electronically the way you would treat it if it were printed on paper. If you quote, paraphrase, or summarize, cite your web source as you would an article in a journal or newspaper. Follow the guidelines in the style guide you are using.

What to look for on a website

- **Name of the author:**
Is the author a recognized authority? Or is the author a student who has posted his or her paper online? If the latter, this person is probably not a recognized authority, and you should not use the information. Unless the source clearly emanates from a reputable publication that is subject to peer review, it is best to assume that it is not authoritative. The adage “when in doubt, leave it out” applies.

- **Name of the website:**
Does the name of the site tell you anything about the information source? Is it that of a reliable news or information agency?
- **Name of the institution sponsoring the website:**
Is the sponsoring institution a name that you recognize as a reliable, unbiased source of information? Examples: the World Health Organization, the United Nations, the American Medical Association.
- **Date:**
Was the site recently updated? Is the information current?

Always look for the author’s name and credentials or for the name of the sponsoring institution. If you cannot locate this information or you are not sure of the reliability of the institution, do not use the information. Anyone can post information on the Internet. Thus, much of it may not be reliable.

Improper Use of Internet Sources

Remember that information on the Internet is not “free.” It should always be paraphrased, quoted, or summarized appropriately.

- Do **not** cut and paste text directly from the Internet into your paper unless you quote directly and cite.
- Do **not** cut and paste images or graphics from the Internet into your paper unless you cite your source.

The Librarians’ Index to the Internet: <http://www.lii.org>

This index, sponsored by the University of California at Berkeley, provides a list of 16,000 web sites that UC and the City of Berkeley librarians have deemed reliable and accurate. Their

motto is, “Information You Can Trust.” The sites are checked on a regular basis to eliminate those that are no longer live. Each new website is reviewed by four library staff members before being placed on the list. This index may be a good place to start if you are searching for information on the Internet.

Citing Electronic Sources

The Internet changes constantly. For this reason, your citations must always include the date you accessed the site and the date of the posting, if it is available. Each style guide format is different, but in each case you are expected to provide as much information as possible about the site.

How do I cite a web page?

As noted before, look for relevant information:

- name of author
- if there is one title of article or section heading of web page
- name of sponsoring organization
- date of electronic publication or update date you accessed the site
- URL

The following examples use the citation style of the American Psychological Association (APA).

How do I cite an article with an author from an online news source?

Shanker, T. and Schmitt, E. (2005, July 6). Pentagon weighs strategy to deter terror. *The New York Time On the Web*. Retrieved July 6, 2005 from <http://www.nytimes.com>

How do I cite an article with no listed author that appears on the web page of an organization?

Somalia launches emergency polio immunization. (2005, July 17). *World Health Organization Home Page*. Retrieved July 17, 2005 from <http://www.who.int/en>

How do I cite an example from an online dictionary?

Editors of Columbia University Press. January 2004). Anthrax. *The Columbia Encyclopedia*, 6th ed. Retrieved July 7, 2005 from <http://www.bartleby.com/6s/an/anthrax.htm> I

How do I cite an article retrieved from a database? (LexisNexis, ProQuest)

Holbrooke, R. (2004, February 10). A global battle's missing weapon. *New York Times*. Retrieved April 4, 2004 from LexisNexis Academic Universe database.

How do I cite information from a government publication I obtain online?

U.S. Food and Drug Administration. (2005, June 4). FDA tentatively approves a generic AIDS drug under the president's emergency plan for AIDS relief. *FDA News*. Retrieved August 6, 2005 from <http://www.fda.gov/jbbs/topics/NEWS/2005/NEW01184.html>

Avoiding Plagiarism: Quoting

When the words of an expert, authority, or relevant individual are particularly clear or expressive, you may want to quote them. Do not quote all the time: save quotes for instances where the wording is especially powerful.

When should I quote?

- When language is particularly vivid or expressive.
- When exact wording is needed for technical accuracy.
- When the words of an important authority lend weight to an argument.

How do I show I am quoting?

- Name the source in an introductory phrase.
- Use quotation marks or indent long quotations.
- Cite the source appropriately.

If you fail to do this, it is plagiarism.

Original source	Accurate quoting	Inaccurate quoting
<p>Because of their unique perspective, Americans fear globalization less than anyone else, and as a consequence they think about it less than anyone else. When Americans do think about globalization, they think of the global economy as an enlarged version of the American economy.</p> <p>Thurow, L. (1993). <i>Fortune Favors the Bold</i> (p. 6). New York: Harper Collins.</p>	<p>Lester Thurow (1993) asserts that the American reaction to globalization is different from that of the rest of world in that “Americans fear globalization less than anyone else, and as a consequence. . . think about it less than anyone else” (p. 6).</p> <p>Why is this correct?</p> <p>The writer has introduced the quotation with his/her own words and has indicated where exact words of the source begin and end. S/he has also named the source in an introductory phrase.</p> <p>(Complete Thurow reference appears in bibliography)</p>	<p>The American view of globalization is unlike that of the rest of the world. Because of their unique perspective, Americans fear globalization less than anyone else, and therefore think about it less than anyone else (Thurow, 1993).</p> <p>Why is this plagiarism?</p> <p>Although the writer has identified the source, s/he has not put quotation marks around his words, thereby allowing the reader to think the words are the writer’s, not Thurow’s.</p>

Avoiding Plagiarism: Paraphrasing

Plagiarism is sometimes unintentional. It can occur when you try to put information from a source into your own words, but fail to do so completely. Often plagiarism occurs not because a student is trying to cheat, but because he or she has not been taught how to paraphrase accurately. Paraphrasing takes skill and practice.

In writing papers, you will paraphrase more than you will quote. For a report or research paper, you may need to gather background information that is important to the paper but not worthy of direct quotation. Indeed, in technical writing direct quotation is rarely used.

Exactly what does “paraphrase” mean?

It means taking the words of another source and restating them using your own vocabulary. In this

way, you keep the meaning of the original text but do not copy its exact wording. For the benefit of students who may not have had practice paraphrasing from sources, the following guidelines may be useful.

What strategies can I use to paraphrase?

- Use synonyms for all words that are not generic. Terms like people, world, or food are so common that it is often difficult to find a synonym.
- Change the structure of the sentence.
- Change the voice from active to passive and vice versa.
- Reduce clauses to phrases.
- Change parts of speech.

and
Cite your source.

Examples:

Original Source	Plagiarism	Paraphrase
<p>Because of their unique perspective, Americans fear globalization less than anyone else, and as a consequence they think about it less than anyone else. When Americans do think about globalization, they think of the global economy as an enlarged version of the American economy.</p> <p>Thurrow, L. (1993). <i>Fortune Favors the Bold</i> (p. 6). New York: Harper Collins.</p>	<p>According to Lester Thurow (1993), Americans fear globalization less than people from other countries and as a consequence spend less time thinking about it. Indeed, Americans see globalization as an enlarged version of their own economy.</p> <p>Why is this plagiarism?</p> <p>The writer has used Thurrow’s exact words without enclosing them in quotation marks. He has only substituted synonyms here and there. Even though Thurrow is credited with a citation, this would be considered plagiarism.</p>	<p>Lester Thurow (1993) maintains that because Americans see globalization simply as a bigger form of their own economy, they are less concerned about it than is the rest of the world.</p> <p>Why is this acceptable?</p> <p>The writer has kept the meaning of the original passage without copying words or structure. Words like globalization and Americans are generic terms (i.e., terms that are commonly used for the concept they illustrate - it is difficult to find synonyms for them). Thus you may use these words without placing them in quotation marks. <i>(Complete Thurrow reference appears in bibliography)</i></p>

Original Source

We do not yet understand all the ways in which brain chemicals are related to emotions and thoughts, but the salient point is that our state of mind has an immediate and direct effect on our state of body.

Source: Siegel, B. (1986). *Love, Medicine and Miracles* (p. 69). New York: Harper and Row.

Acceptable Paraphrase #1

Siegel (1986) writes that although the relationship between brain chemistry and thoughts and feelings is not fully understood, we do know that our psychological state affects our physical state.

Why is this acceptable? What did the writer do?

- Used synonyms
- Changed sentence structure
- Changed voice
- Cited source

Words like brain are generic and do not need to be changed.

Acceptable Paraphrase #2

Siegel (1986) writes that the relationship between the chemicals in the brain and our thoughts and feelings remains only partially understood. He goes on to say, however, that one thing is clear: our mental state affects our bodily state.

Why is this acceptable? What did the writer do?

- Used synonyms
- Changed sentence structure (used two sentences instead of one)
- Changed voice
- Changed parts of speech
- Cited source

Words like brain and chemicals are generic and do not need to be changed.

As you can see, a good paraphrase combines a variety of strategies. Be very careful not to use only one strategy; replacing words with synonyms is not enough. Look at the following example of unacceptable paraphrasing:

Unacceptable Paraphrase

Siegel (1986) writes that **we still do not know all the ways in which** brain chemistry is **related to emotions and thoughts, but the important point is that our** mental state **has an immediate and direct effect** on our physical state.

Why is this unacceptable?

- The writer has kept the same exact sentence structure
- The writer has only substituted synonyms in certain places; in others the wording is exactly the same as that of the original.

Even though the writer mentions the original source in the introductory phrase, the result is plagiarism.

Avoiding Plagiarism: Summarizing

Summary and paraphrase are somewhat different. A paraphrase is about the same length as the original source, while a summary is much shorter. Nevertheless, when you summarize, you must be careful not to copy the exact wording of the original source. Follow the same rules as you would for paraphrase.

Choosing Whether to Quote or to Paraphrase

Sometimes students are not sure when to quote directly and when to paraphrase. As we said before, quote only if the language is particularly expressive and/or adds weight to your argument.

Example of a good use of quotation:

After the Challenger disaster of 1986, it was learned that NASA was so anxious to launch the shuttle that it had overlooked certain safety measures. Nobel physicist Richard Feynman later observed that “for a successful technology, reality must take precedence over public relations, for nature cannot be fooled” (cited in Katz, 1999).

Feynman’s credentials and the fine wording of his comment deserve quotation here.

Example of unnecessary quotation – paraphrase would be better:

The World Health Organization is conducting a study on the connection between cell phone use and brain cancer. Until the study is published, the World Health Organization “suggests that persons concerned about cell phone

use can limit the length of calls, use a hands-free device to keep cell phones away from the head and body, and avoid using cell phones while driving” (National Brain Foundation, 2005).

The wording of this information is not particularly noteworthy. In this case, it would be better to paraphrase:

The World Health Organization is conducting a study on the connection between cell phone use and cancer. Until the results are published, the WHO recommends that those who may be worried about such a link keep their calls short, curtail phone use while on the road, and use hands-free equipment to maintain distance between the phone and the user (National Brain Tumor Foundation, 2005).

Sources:

Katz, J. (1999, May 13). Retrieved July 6, 2005 from <http://wuphys.wustl.edu/~katz/naturefooled.html>

National Brain Tumor Foundation: connection between cell phone use and brain tumors studied. (2005, July 9). *Law and Health Weekly*. Retrieved July 10, 2005 from LexisNexis Academic Universe database.

Avoiding Plagiarism: Citing Facts and Statistics

Any time that you refer to facts, statistics, or other specific information pertinent to your topic, you must tell your reader where you got them; that is, you must cite your source. Not all pieces of specific information need to be cited, however. If the information is “common knowledge,” you do not need to cite it.

What is common knowledge?

Common knowledge is any information that the average, educated reader would accept as reliable without having to look it up.

This includes:

- General information that most people know, such as: water freezes at 32 degrees Fahrenheit.
- Information shared by a cultural group, such as the dates of national holidays or names of famous heroes.
- Knowledge shared by members of a certain field, such as the fact that the necessary condition for diffraction of radiation of wavelength λ from a crystalline solid is given by Bragg's law.

This situation can be tricky, however. What may be common knowledge in one culture - or in one specific group of people - may not be common knowledge in another. For example, the following would be considered common knowledge to an audience educated in the United States:

- The American Space Shuttle Challenger exploded shortly after taking off, killing all its crew and passengers.

- Global warming has become a concern of scientists all over the world; in response, many nations have sought to introduce policies to reduce the emission of greenhouse gasses.
- Patrick Henry's statement, “Give me Liberty, or Give me Death!” became a rallying cry for the American Revolution.

The specific dates, facts, and trends referred to above comprise information the average, educated reader would know. It is highly unlikely that anyone would challenge these statements. Thus, they do not need to be cited.

What is not common knowledge? What needs to be cited?

- All statistics, data, figures.
- References to studies done by others.
- References to specific facts the average reader would not know about unless he or she had done the research.

The following are examples of statements that need citation:

- Between 1990 and 2002, the United States was the recipient of \$1.27 trillion in direct foreign investment. This amount is more than the combined total received by the United Kingdom, France, Germany and Japan.
- In the last thirty years, discussion has focused on the possible link between overhead power lines and cancer in children. Researchers have investigated whether a connection exists between the low magnetic fields produced by power lines and childhood leukemia, but the evidence remains inconclusive.

- The free energy of mixing per site for a binary polymer blend with differing degrees of polymerization can be described through the Flory-Huggins equation.

Sources:

Thurow, L. (1993) *Fortune Favors the Bold* (p. 199). New York: Harper Collins. 2003.

Power lines and cancer. (2005, June 4). *The Economist Online*. Retrieved June 4, 2005 from <http://www.economist.com/>

Flory, P.}. (1953). *Principles of Polymer Chemistry*. Ithaca, NY: Cornell University Press.

Each of these statements contains information that would not be known to the average reader. The last equation is specific to the thermodynamics of macromolecular mixtures and would not be considered common knowledge by many scientists or engineers. Therefore, the best advice is: When in doubt, cite your source.

Avoiding Plagiarism: Writing Computer Code

Plagiarism can also occur when you write code.

It is still plagiarism if the student borrows the structure of the original program exactly while changing only a few details that do not affect the meaning of the program

If a student's program is clearly derived from the program in the textbook, the student's action can be compared to paraphrasing a passage from a reference book.

Test: What is Common Knowledge?

Which of these statements would be considered common knowledge? Which need to be cited?

(Answers appear at the bottom of the page.)

Sources:

1. Arsenic in drinking water. (2001, May). *World Health Organization*. Retrieved August 8, 2005 from <http://www.who.int/mediacentre/factsheets/fs210/en>

1. When water passes through rocks that contain arsenic, the arsenic may leach into the water, poisoning it. This issue has been a particular problem in Bangladesh.
2. The development of structural steel and the invention of the elevator made it possible for tall office buildings to be built. Before that time, large buildings had to be supported by their own walls.
3. Stem cell research offers promise in the development of treatments for certain kinds of diseases.
4. Some have argued that the benefits of the Internet have reached all levels of society, while others point to the fact that a 1999 study revealed that Internet access is closely tied to income levels, with households earning \$75,000 or more having the highest rate of access.

4. United States Department of Commerce. (1999, July). *Falling through the net: defining the digital divide*. Retrieved July 5, 2005 from <http://www.ntia.doc.gov/ntiahome/ftn99/contents.html>

Source:

Examples of plagiarism. Academic Integrity at Princeton. Retrieved

September 3, 2004 from <http://www.princeton.edu/pr/pub/integrity/pages/plagiarism.html>

Answers

1. Yes, citation is needed. In particular, the specific reference to Bangladesh makes this information something that the average reader would not know unless he or she had done the research.
2. No, citation is not needed. First, this text makes sense logically and is observable historically. Second, no one would challenge this assertion.

3. No, citation is not needed. This information is widely known.
4. Yes, citation is needed. The specific reference to a 1999 study and the figure that is mentioned is something the average reader would not know unless he or she had done the research.

Collaboration

Collaborative work is vital to the spirit and intellectual life of the University. In some classes, you will be encouraged to collaborate with other students on problem sets, projects, or papers. The amount of collaboration will vary from class to class. Find out from your instructor how much collaboration is permitted. The details may be clearly stated in the course handouts. If they are not, ask your instructor to be specific about how much collaboration he or she allows. Make sure you know where to draw the line between collaboration and what could be considered cheating.

The following example shows the collaboration guidelines for one class:

Collaboration Policy for 3.014. Materials Laboratory Fall Term*

In preparing your reports, you are encouraged to discuss your results with your labmates. Data and figures may be shared between students in your lab group for the purpose of preparing your report, provided proper acknowledgment is made in your reports.

All writing in 3.014 must be original. Students should not copy any portion of their laboratory reports from reference materials or the reports of other students. Students should not use reports from previous years or their labmates' reports in preparing their own reports. 3.014 has a zero tolerance policy on plagiarism. Any student caught plagiarizing will

receive a grade of zero on the assignment and be taken to the Student Disciplinary System for disciplinary action.

* Used with permission of Professor Anne Mayes, Dept. of Material Science, Massachusetts Institute of Technology.

You are responsible for knowing what acts constitute plagiarism. For a tutorial on plagiarism please refer to the URL:

http://gethelp.library.upenn.edu/PORT/documentation/avoiding_plagiarism.html.

Also see:

http://gethelp.library.upenn.edu/PORT/documentation/plagiarism_policy.html

Good Work Habits: Study, Research and Writing

Penn will ask much of you. You may find yourself short of time, with several assignments due the same day. Pressure can be intense. In a later section, we will discuss ways to manage your time so as to avoid becoming overwhelmed. No matter the level of stress under which you may find yourself, however, you must not commit acts of academic dishonesty.

1. Manage your time:

Plan ahead: find out when assignments are due and mark them on a calendar

- Do not try to do them at the last minute.
- Set a certain amount of time apart each day for each course
- Make a work schedule for yourself and try to keep to it.
- If you cannot meet a deadline, talk to the

instructor. Most Penn instructors are reasonable. We would much rather have you ask for an extension than cut corners by being academically dishonest.

2. Take careful notes

Recently, a number of scholars have been accused of plagiarism. Several claimed bad note-taking practices as the cause of their mistakes: in taking information from another source, these writers had copied several sentences without putting them in quotation marks. When these researchers transferred their notes into their own text (they claimed), they believed the sentences were their own and presented them as such. The result was plagiarism. The increasing availability of sources in electronic form and the ease with which text may be extracted from them can facilitate this practice.

Such plagiarism can be avoided by taking careful notes:

- Write down the page number, author, and title of each source every time you make a note. Do this whether you paraphrase, quote, or jot down useful facts and figures.
- Put quotation marks around any exact wording you take from a source.
- Paraphrase accurately (see Avoiding Plagiarism: Paraphrase, p. 9).
- Keep a running list of all sources: articles, books, online sources and their URLs.

If you feel confused about the work in class or unclear about an assignment,

3. Ask for help

- Talk to the professor or instructor.
Make an appointment to see him or her outside of class. If you cannot schedule an appointment within the posted office hours, send the instructor an email requesting another time.
- Use office hours.
Seek help with assignments during office hours. Faculty at Penn often comment that students do not use this opportunity enough. Office hours provide the opportunity for additional contact with faculty, not only to seek their help but to get to know faculty better and to give them the chance to know you.
- Talk to the Teaching Assistant (TA).
TAs have office hours. Many make themselves available any time, via email. Use this option to get help if you need it. TAs expect to be contacted; it is part of their job.
- Seek the help of your academic advisor.
If you have a problem you do not feel comfortable talking about with your professor, talk to your academic advisor.

4. Use the Penn Writing Center.

The Penn Writing Center offers expert writing help to both undergraduate and graduate students. You can make an appointment online for a session with a trained writing tutor who will help you with your writing assignments. Drop-in hours are also available. Many tutors are knowledgeable about the particular needs of non-native English speakers, and all tutors are experienced with work Penn students are required to do.

There is no charge to use the Center. Make an appointment online and visit the site:
http://www.writing.upenn.edu/critical/help_wc.html.

5. Use the Weingarten Learning Resources Center.

Consult a Learning Instructor about writing strategies and time management.
<http://www.vpul.upenn.edu/lrc>

6. Use Academic Support Services

<http://www.vpul.upenn.edu/academic.html>

Style Guides

Each discipline has a preferred style of formatting. Ask your instructor which style he or she prefers. Each style is usually referred to by its initials. For example

Modern Language Association Style (MLA) is often used in the arts and humanities;

American Psychological Association Style (APA) is often used in history, economics, psychology, and political science;

Chicago Manual of Style (CMS) is often used in architecture and urban planning;

Council of Science Editors Style (CBE) is often used in biology and other sciences.

For additional examples and information on citation see the Penn Library web site at http://gethelp.library.upenn.edu/PORT/documentation/documentation_styles.html

