Chapter 3: Ethics

Applying Ethics in Technical and Professional Communication

Matt McKinney

As <u>Chapter 2: The Rhetorical Situation</u> details, effective technical and professional communicators analyze and respond to context, genre conventions, deliverer-audience relationships, and other rhetorical elements. Understanding the variables and dynamics of specific rhetorical situations ensures that documents and presentations fulfill their purposes effectively, and that all parties are as satisfied as possible. However, rhetorical elements are not the only factors technical and professional communicators need to consider.

Beyond responding to their audiences and demonstrating mastery of genre conventions, technical and professional communicators must also make sure that they are communicating and behaving ethically. Broadly speaking, ethics refers to principles of right and wrong that govern your behavior and actions.

It is difficult to understate the potential damage unethical professional communication can cause, including the theft of intellectual property, creating unsafe or toxic working conditions, upholding systems of oppression, and even causing environmental destruction. As daunting as this range of consequences seems, however, it also illustrates the power you have as a professional, and the good you can do, when you practice ethical communication and ensure that others do so as well.

As a professional, ethics applies to the way you conduct yourself on the job, the way you engage with colleagues, clients, subordinates, and superiors, and the way you utilize company time and resources. As a writer and speaker, ethics applies to how you present, arrange, and emphasize your ideas and others'. Ethics also applies to the information you omit or suppress in a document, as well as how well you recognize and manage your biases when communicating and presenting ideas. This chapter will guide you through these applications of ethics, providing you with general strategies to apply to specific and often complex situations.

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Workplace and Professional Ethics in Technical Communication

Matt McKinney, Annemarie Hamlin, Chris Rubio, and Michele DeSilva

Technical communication occurs within a wide variety of professional sectors, including medicine, law, industry, and academia. In all of these sectors, communicators encounter several potential ethical issues

and dilemmas. Whenever you join an organization, institution, or professional community, you should always familiarize yourself with their code(s) of conduct for technical and professional communication. Learning the expectations for your position will help you establish habits that reinforce your skills and practice as an ethical communicator.

Principles of Ethics in Technical and Professional Communication

In addition to specific codes of conduct, there are also some universal principles that technical and professional communicators can rely on to ensure that they apply their skills and present ideas ethically. The Society of Technical Communication (STC) offers six principles as focal points for practicing ethical communication:¹

- 1. **Legality**. Are you aware of the laws and regulations relevant to your discipline and/or institution? Are you aware of the laws that apply to the scale of your project, study, or business, from local to international, and do you follow them in good faith?
 - Case Study Example. In 2014, it was discovered that Volkswagen had been violating US emissions laws with their diesel cars for years. The company's engineers did this by installing "defeat device" software that activated emission-control devices only when two wheels were running, rather than four—a sign that the car was being tested in a lab. As a result, the lab reports detailing the cars' emission levels contained deliberately falsified results. Because Volkswagen's corporate leadership violated US law— and pressured their engineers to do so on their behalf—the company's reputation suffered a huge blow. More importantly, they caused significant harm to the planet by marketing cars that contributed excessively to air pollution.
- 2. Honesty. Do you communicate honestly, both orally and in writing? Do you actively strive to provide clarity when your meaning might be misconstrued by your audience, intentionally or not? Do you give credit to the work and ideas of others who made substantial contributions? Do you respect your employers' time and resources, and avoid taking advantage of either for your own purposes?

Case Study Example: In 2015, former chemistry professor Brian McNaughton of Colorado State University committed forgery. Feeling that he was underpaid, he wrote a fake offer letter from the University of Minnesota's interim dean to seem like a more desirable scholar. Based on this forged document, CSU made him a counteroffer that included a raise and increased access to lab equipment and other university resources. McNaughton was caught two years later and charged with a felony.³ Not only did McNaughton ruin his own reputation by forging the letter, he effectively stole money and resources from a state-funded institution (i.e., taxpayers). He also

¹ "Ethical Principles," Society for Technical Communication, September 1998, accessed August 3, 2020, https://www.stc.org/about-stc/ethical-principles/.

² Carlos Santos and Luann J. Lynch, "VW Emissions and the 3 Factors That Drive Ethical Breakdown," Darden Ideas to Action, October 17, 2020, https://ideas.darden.virginia.edu/vw-emissions-and-the-3-factors-that-drive-ethical-breakdown.

³ Jack Stripling and Meghan Zahneis, "The Big Lie," *The Chronicle of Higher Education*, September 4, 2018, https://www.chronicle.com/article/the-big-lie/.

appropriated and misrepresented the professional ethos of the dean from U. Minnesota to deceive his employer.

Other Examples: accurately reporting expenses and any personal time taken when traveling for work; explicitly acknowledging colleagues' and coworkers' contributions to team projects and presentations; not using your work computer for another job or excessive personal use.

3. **Confidentiality**. Do you respect the privacy of your clients, colleagues, students, employees, employers, and/or organization? Do you only share private information when legally obliged or with appropriate prior consent from involved parties?

Examples of Respecting Confidentiality: Psychiatrists not discussing their patients' medical histories; professors not posting identifying and/or pejorative information about students on social media; employees password-protecting their computers and keeping confidential documents onsite and secured.

Examples of Ethical Disclosure of Private Information: psychiatrists alerting law enforcement about patients who intend to harm others; professors asking students if they can share their work with future classes; whistleblowers alerting federal regulatory agencies about white-collar crime.

4. **Quality**. Do your written documents and oral presentations reflect your best work as a communicator? Do you promote transparency and realistic expectations when you communicate, so that you can meet your audience's needs and perform ethically?

Case Study Example: Since March 2020, when the COVID-19 pandemic broke out in the United States, Dr. Anthony Fauci has made a conscientious effort to qualify all of his public statements and predictions about when a potential vaccine for the virus would be made available. During that first month, he estimated that it would take "a year to a year and a half" for a vaccine to be developed. Although Dr. Fauci is aware that the American public and government want a vaccine as soon as possible, he is also the director of the National Institute of Allergy and Infectious Diseases (NIAID). Further still, as a globally renowned medical professional, he is well acquainted with the steps that a vaccine trial process entails before one is safe for public distribution. Consequently, his institutional role and knowledge ethically obligate him to specify any factors or variables that are essential to a quality vaccine.⁴

5. **Fairness**. Do you recognize and honor diversity in your organization? Do you ensure that your clients' and other stakeholders' interests are served in alignment with the public good? Do you avoid and/or disclose potential conflicts of interest when engaging in professional activities?

Examples of Honoring Diversity: crafting employee-training materials on different forms of bias (such as bias regarding gender or race); writing and distributing job ads in a way that emphasizes hiring a diverse array of people (from entry-level to leadership roles); monitoring a company's workplace culture by creating an internal committee or hiring a consultant to investigate progress in diversity.

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⁴ Stephanie Souchery, "Fauci: Vaccine at Least Year Away, as COVID-19 Death Toll Rises to 9 in Seattle," *CIDRAP News*, March 3, 2020, https://www.cidrap.umn.edu/news-perspective/2020/03/fauci-vaccine-least-year-away-covid-19-death-toll-rises-9-seattle.

Examples of Serving Clients and Honoring the Public Good: an architect designing a building that is wheelchair-accessible and uses sustainable materials; a professor who consults with community leaders before assigning a community-based learning project, so that the project is helpful to the community while also teaching students course concepts.

Examples of Avoiding/Disclosing Potential Conflicts of Interest: coworkers reporting their office romance to human resources; a company recruiter recusing themself from interviewing a close friend or relative.

6. **Professionalism**. Do you constantly seek to refine your practice and skills as a technical communicator? Do you demonstrate empathy, respect, and constructive criticism when engaging with others and their technical communication skills? Do you make yourself an asset to the professional and communicative growth of others in your field or organization?

Examples of Professionalism: establishing clear values and guidelines for technical communication in your organization; reinforcing those guidelines and values for colleagues and subordinates through your own communication; participating in (or organizing) professional workshops, seminars, and conferences on improving technical communication skills.

How Bias Influences Unethical Communication

You might notice that most of these ethics violations could easily happen accidentally. Directly lying is unlikely to be accidental, but even in that case, the writer could persuade themself that the lie achieved some "greater good" and was therefore necessary.

Even more common is an ethics violation resulting from the person who is designing the information seeing it as evidence for whatever they understand as true, and honestly not recognizing the bias in how they have presented that information.

Many ethics violations in technical writing are (probably) unintentional, but they are still ethics violations. That means a technical writer must consciously identify their biases and check to see if a bias has influenced any presentation: whether in charts and graphs, or in discussions of the evidence, or in source use or in placement of information.

For example, scholarly research is theoretically intended to find evidence either that the new researcher's ideas are valid (and important) or evidence that those ideas are partial, trivial, or simply wrong. In practice, though, most folks are primarily looking for support: "Hey, I have this great new idea that will solve world hunger, cure cancer, and make mascara really waterproof. Now I just need some evidence to prove I am right!"

In fact, if you can easily find 94 high-quality sources that confirm you are correct, you might want to consider whether your idea is worth developing. Often in technical writing, the underlying principle is already well-documented (maybe even common knowledge for your audience) and you should instead use that underlying principle to propose a specific application.

Using a large section of your report to prove an already established principle implies that you are saying something new about the principle—which is not true. A brief mention ("Research conducted at major research universities over the last ten years (see literature review, Smith and Tang, 2010) establishes that....") accurately reflects the status of the principle; then you would go on to apply that principle to your specific task or proposal.

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Presentation of Information

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How a writer presents information in a document can affect a reader's understanding of the relative weight or seriousness of that information. For example, hiding some crucial bit of information in the middle of a long paragraph deep in a long document seriously de-emphasizes the information. On the other hand, putting a minor point in a prominent spot (say the first item in a bulleted list in a report's executive summary) tells your reader that information is crucial.

Sometimes de-emphasizing crucial information can lead to disastrous consequences. A classic example of this occurring is in the memo report NASA engineers wrote about the problem with O-ring seals on the space shuttle *Challenger*, which exploded seconds after takeoff due to faulty engineering. ⁵ The crucial information about the O-rings (O-rings provide a seal) was buried in a middle paragraph, while information approving the launch was in prominent beginning and ending spots. Presumably, the engineers were trying to present a full report, including identified problematic components in the *Challenger*, but the memo's audience of non-technical managers mistakenly believed the O-ring

⁵ Presidential Commission on the Space Shuttle Challenger Accident, "Chapter VI: An Accident Routed in History," in Report to the President (Washington, DC, June 6, 1986). Available at *NASA History*, National Aeronautics and Space Administration, https://history.nasa.gov/rogersrep/v1ch6.htm

problem to be inconsequential, even if it happened. The position of information in this document did not help them understand that the problem could be fatal.

Ethical writing thus not only involves being honest, of course, but also presenting information so that your target audience will understand its relative importance and whether a technical fact is a good thing or a bad thing.

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Typical Ethics Issues in Technical Writing

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There are a few issues that may arise when a writer is researching a topic for the business or technical world.

Research that Does Not Support the Project Idea

In a technical report that contains research, you might discover conflicting data that does not support the project's goal. For example, your small company has problems with employee morale. Research shows that bringing in an outside expert, someone who is unfamiliar with the company and the stakeholders, has the potential to impact the greatest change. You discover, however, that bringing in such an expert is cost prohibitive. Should you leave this information out of your report, thereby encouraging your employer to pursue an action that is really not feasible? Conversely, should you include the information at the risk of not being able to offer the strongest solution?

Suppressing Relevant Information

Suppressing relevant information can include a variety of factors, including the statistical significance of data or the researchers' stake in the findings. For example, a study in 2015 found that driving while dehydrated is about as dangerous as driving while under the influence of alcohol. While this was widely reported in popular news sources, these sources failed to highlight some of the most important aspects of the study. To begin with, the study was only conducted using 12 people, and only 11 of them reported data. Furthermore, the study was conducted by an organization called the European Hydration Institute, which in turn is a think-tank subsidiary of the Coca-Cola corporation. In other words, not only was the sample size far too small to make this claim, but the data collection was designed and

implemented by a corporation with a stake in the findings, since they profit off the sale of hydration products. ⁶ This case illustrates the ethical dubiousness of suppressing important contextual information for the sake of a sensational headline.

Not Verifying Sources Properly

Whenever you incorporate others' ideas into your documents, especially quotations, make sure that you are attributing them to the correct source. Mark Twain, supposedly quoting British Prime Minister Benjamin Disraeli, famously said, "There are three kinds of lies: lies, damned lies, and statistics." On the other hand, H.G. Wells has been (mis)quoted as stating, "statistical thinking will one day be as necessary for efficient citizenship as the ability to read and write." When using quotes, even ones from famous figures that regularly appear as being commonly attributed to a particular person, it is important to verify the source of the quote. Such quotes often seem true, because the ideas they present are powerful and appealing. However, it is important to verify the original source both because you need to make sure that your quote is, in fact, correct, and that it is not being taken out of context from the original source. The effective use of statistics can play a critical role in influencing public opinion as well as persuading in the workplace. However, as the fame of the first quotation indicates, statistics can be used to mislead rather than accurately inform—whether intentionally or unintentionally.

Presenting Visual Information Ethically

Visuals can be useful for communicating data and information efficiently for a reader. They provide data in a concentrated form, often illustrating key facts, statistics, or information from the text of the report. When writers present information visually, they have to be careful not to misrepresent or misreport the complete picture. Many of the guidelines for designing informational graphics in Chapter 8 are meant to help ensure that you present your data ethically, primarily by not misleading readers and by ensuring access for as many readers as possible.

Figure 3.1 below shows information in a pie chart from two different perspectives. The data in each is identical, but the pie chart on the left presents information in a misleading way. What do you notice about how that information is conveyed to the reader?

⁶ Reed, Ryan. "Watch John Oliver Call Out Bogus Scientific Studies." *Rolling Stone*, May 9, 2016. https://www.rollingstone.com/tv/tv-news/watch-john-oliver-call-out-bogus-scientific-studies-60448/; LastWeekTonight. "Scientific Studies: Last Week Tonight with John Oliver (HBO)." YouTube, May 8, 2016. https://www.youtube.com/watch?v=0Rnq1NpHdmw.

⁷Mark Twain, *Mark Twain's Autobiography*, Volume 1, produced by Don Lainson, (Project Gutenberg of Australia, 2002), Project Gutenberg Australia.

⁸This particular quote comes from Samuel S. Wilkes, who is misquoting H.G. Wells. S.S. Wilkes, "Undergraduate Statistical Education," *Journal of the American Statistical Association*, 46, no. 253 (March 1951): 5, https://doi.org/10.1080/01621459.1951.10500763.

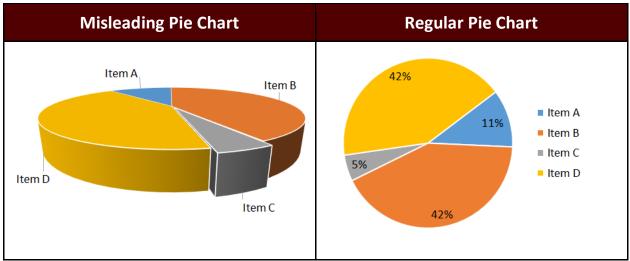
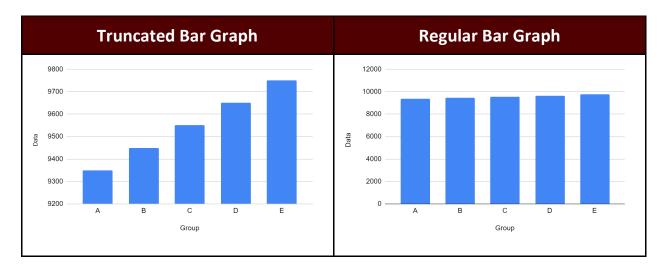


Figure 3.1. Misleading and regular pie charts. In the misleading pie chart, item C appears to be at least as large as item A, whereas in actuality, it is less than half as large.

Imagine that these pie charts represented donations received by four candidates for city council. The candidate represented by the gray slice labeled "Item C" might think that she had received more donations than the candidate represented in the blue "Item A" slice. In fact, if we look at the same data in the 2D chart, we can see that Item C represents fewer than half of the donations compared to those for Item A. Thus, a simple change in perspective can change the impact of an image.

Similarly, take a look at the bar graphs in Figure 3.2 below. What do you notice about their presentation?



⁹ Annemarie Hamlin, Chris Rubio, and Michele DeSilva, "Misleading and Regular Pie Charts," in "Typical Ethics Issues in Technical Writing," licensed under a <u>Creative Commons Attribution 4.0 International</u> License, in Gross, Allison, Annemarie Hamlin, Billy Merck, Chris Rubio, Jodi Naas, Megan Savage, and Michele DeSilva, *Technical Writing*, (Open Oregon Educational Materials, n.d.), https://openoregon.pressbooks.pub/technicalwriting/. Licensed under a <u>Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License</u>.

Figure 3.2. Truncated and regular bar graphs. ¹⁰ Note that both of these graphs display identical data; however, in the truncated bar graph on the left, the data appear to show significant differences, whereas in the regular bar graph on the right, these differences are hardly visible.

If the bar graph above were to represent sales figures for a company, the representation on the left would look like good news: dramatically increased sales over a five-year period. However, a closer look at the numbers reveals that the graph shows only a narrow range of numbers in a limited perspective (9100 to 9800). The bar graph on the right, on the other hand, shows the complete picture by presenting numbers from 0-1200 on the vertical axis, and we see that the sales figures have in fact been relatively stable for the past five years.

Presenting data in graphical form can be especially challenging. As you prepare your graphics, keep in mind the importance of providing appropriate context and perspective.

Limited Source Information in Research

Thorough research requires you to incorporate and synthesize information from a variety of reliable sources. Your document or presentation should demonstrate that you have examined the topic from as many angles as possible. Thus, your sources should include scholarly and professional research from a variety of appropriate databases and journals, as opposed to just one author or website. Using a range of sources helps you avoid potential bias that can occur from relying on only a few experts. If you were writing a report on the real estate market in Central Texas, you would not collect data from only one broker's office. While this office might have access to broader data on the real estate market, as a writer you run the risk of looking biased if you only chose materials from this one source. Collecting information from multiple brokers would demonstrate thorough and unbiased research.

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¹⁰ Annemarie Hamlin, Chris Rubio, and Michele DeSilva, "Truncated and Regular Bar Graphs," in "Typical Ethics Issues in Technical Writing," licensed under a <u>Creative Commons Attribution 4.0 International License</u>, in Gross, Allison, Annemarie Hamlin, Billy Merck, Chris Rubio, Jodi Naas, Megan Savage, and Michele DeSilva, *Technical Writing*, (Open Oregon Educational Materials, n.d.), https://openoregon.pressbooks.pub/technicalwriting/. Licensed under a <u>Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License</u>.

Acting Ethically & Responding to Unethical Situations

Matt McKinney

While communication plays a significant role in technical and professional ethics, it is also important to understand what it entails to be ethical and act ethically. Most people do not require a textbook to understand that embezzlement and nepotism are unethical; at the same time, these situations do occur, and you may not know how to respond in the moment--especially if you do not have prior experience with them.

To promote effective and ethical responses to unethical situations, most organizations and employers provide recurring job training on some of the more common and egregious scenarios. These scenarios include:

Whistleblowing. Whistleblowing occurs when a member of an organization (usually someone of lower rank) reports unethical activity that is pervasive (usually committed by someone of higher rank). This can include fraudulent business practices, sexual harassment, corporate espionage, etc. Unfortunately, however, whistleblowers are often punished for exposing unethical activity. Should you be in a situation when you are obligated to report unethical activity, make sure you are aware of the protections and resources at your disposal, as well as potential consequences. Conversely, if you are in a position to protect a whistleblower's privacy and safety (e.g., if you are a journalist), you are obligated to do so.

Respecting and Promoting Diversity. Creating a work environment that values diversity goes far beyond the hiring process. Always defer to the perspectives of communities you are not a member of on issues that concern that community. Whenever possible, make sure that decisions that could affect a particular community are made by members of that community. If your organization has a space for members or employees in marginalized communities (such as a campus diversity office), respect their privacy and do not attempt to insert yourself in that space. Make sure that you properly acknowledge and uplift the work of all employees, and empower them if you are in a position to do so.

Sexual Harassment. Respect the personal space and privacy of other members in your organization, and never use institutional power to take advantage of a subordinate. If someone in your organization discloses that they were the victim of sexual harassment, encourage them to report it to Human Resources and respect the victim's right to report. However, also keep in mind that laws such as Title IX require organizations like universities to report sexual harassment whether or not the victim wants this outcome. In those situations, be sure to inform the victim of your obligation to report in advance.

Theft or Abuse of Company Resources. Theft from an organization can manifest in a variety of forms. While we often think of theft in terms of money, such as embezzlement or tax fraud, this can also apply to company property, such as office supplies. Additionally, it is becoming increasingly common for workers to boost their income through freelance work or a second part-time job--i.e., a side-hustle. While there is nothing wrong with doing so, be sure to keep this separate from your main job. For example, do not run your YouTube channel using your company computer or AV equipment. If your

second job creates a conflict of interest with your primary employer (such as freelancing for a competitor), you must report that activity.

In all situations where unethical activity could potentially occur, always be mindful of your words and actions; you are responsible for ensuring that you are not enabling or contributing to this activity, even inadvertently. Consider the consequences, short- and long-term, for all people involved in these situations, and be aware of the resources and procedures in place for reporting unethical activity. With luck, you will never have to apply this knowledge, but it is far better to possess it and not need it than the reverse.

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