

## **Persuasive / Argumentative**

The main purpose of this type of writing is to convince. It contains the opinions, thoughts, and biases of the author. The writer uses justifications, arguments, and reasons to make the readers agree to his or her points.

### **Highlights**

- It asks the readers to do something for the situation
- It has reasons, arguments, and justification

### **Areas of Usage**

- Speeches
- Cover Letters
- Editorial Pieces
- Letters of Complaints
- Letter of Recommendation
- Newspaper Opinion
- Review
- Critical Analysis
- Business Idea
- Advertisements or Commercials

### **Sample**

1. Our store has the lowest prices and the best collection of footwear in the entire town. Visit us today for a great experience.
2. An LMN mattress is the most comfortable one you will ever sleep on. Highly recommended by doctors. Give yourself a peaceful sleep today.

In the above examples, the writer is trying to convince the reader for the trial as used in an advertisement. This is the persuasive style of writing.

## **Descriptive**

The main purpose of this type of writing is to describe. It focuses on describing a character, a place, an event, an object or an action. There is a very slight difference between expository and descriptive writing styles. The descriptive style is more detailed, personal and subjective.

### **Highlights**

- It uses figures of speech
- The writer makes the readers feel, hear, and visualize the situation the way he wants
- It describes places, people, events, situation, or locations in a highly – detailed manner

### **Areas of Usage**

- Poetry
- Novels
- Diaries Writing
- Plays
- Journals Writing

### **Sample**

A grand exhibition was held in the town. The first impression on entering the ground was of walking in some fairyland. The vast space was decorated with so many colourful lights. The stalls, there, were like small shops and they had all the needful items. All types of amusements could be seen there. The children were enjoying the ride on merry – go – round, the giant wheel, railway train and other. The excitement and joy could be seen easily.

In the above sample, the writer wants to describe his visit to the exhibition. It is a descriptive style of writing.

## Graphics

Graphics used in technical documentation serve a specific purpose - to present information in the clearest format possible for the reader. Basic graphic principles apply:

- avoid clutter,
- orient the image properly,
- be aware of scale,
- always verify content, and
- avoid any graphic that is extraneous.

Graphics should never be used to dress up a document; they should only be used to enhance understanding. When principles of design replicate principles of thought, the act of arranging information becomes an act of insight (E. Tufte intro).

A reader's attention is drawn to graphics more than to blocks of text. The use of graphics enables writers to present technical information more clearly and emphatically than words alone. Therefore, graphics for a technical document must be designed, edited, and prepared with precision to avoid weakness. Readers often look at graphics quickly. The message in a figure or table should be clear and readily apparent. The writer should be familiar with the intended audience of the document so that the right graphics are selected. Each graphic should focus on clearly conveying one piece of information.

Uncomplicated graphics work best. Avoid what Edward Tufte calls "chart junk" (E. Tufte, *Visual*) that distracts the reader from the intended information the graphic is presenting. The *Franklin Covey Style Guide for Business and Technical Communication* provides comprehensive guidelines for each of the graphical components, and this wiki content text draws heavily upon it for both content and style recommendations (Franklin).

There are several types of graphics, each with its own function. Graphics can represent these elements in a technical document:

- Numbers:
  - Tables
  - Graphs
    - Bar graphs
    - Line graphs
    - Pie graphs
  - Maps
- Concepts:
  - Charts
    - Flow Charts

- Organizational charts
  - Scheduling Charts
- Objects:
  - Photographs
  - Illustrations
    - Drawings
    - Diagrams
    - Schematics
- Words - Words emphasized by boxing them, by changing the color or the font, or enlarging them to call attention in a text are all forms of graphics, albeit not very sophisticated (McMurrey).

Visual techniques for depicting quantity include direct labels - for example, the numerically labeled grids of statistical graphics; encodings - for example, color scales; and self-representing scales - for example, objects of known size appearing in an image (E. Tufte 13).

Illustrations are classified as either tables or figures: if the illustration is not a table (information is presented in columns and rows), then it is a figure. Tables and illustrations are numbered independently; within each category, they are numbered sequentially.

## Tables

Tables are the best graphic to use when readers need to focus on specifics. "A table is an effective display for two-dimensional data, usually when one dimension is a collection or series of items and the second dimension consists of attributes or characteristics that all or most of the items have in common, such as description, type, size, and color" (Gurak 357). Tables can communicate many details in a simple way; details that would be hard to comprehend if done through words alone. An advantage of tables is that they can be quickly scanned for information and that "commonalities and differences" across entries are readily apparent (Gurak 358).

## Guidelines for Creating Tables

- Explain what the table contains and how it will help the reader.
- Give the table either a title or caption, as appropriate.
- Write informative, understandable, and visually distinct heading labels.
- Make rows distinct through headings or display of categories.
- Avoid wordiness, limit text in cells to a few words.
- Use color coding and symbols to facilitate quick scanning and data comparison.
- Ensure the table will be readable in the display format.

Model No.	W (in)	H (in)	T (in)	Anchor Bolts		Number of Screws in Top of Wall	Total Wall Weight (lbs)
				Qty.	Dia. (in)		
SSW12x7	12	80	3½	2	¾	4	74
SSW15x7	15	80	3½	2	1	6	86
SSW18x7	18	80	3½	2	1	9	99
SSW21x7	21	80	3½	2	1	12	117
SSW24x7	24	80	3½	2	1	14	127
SSW12x7.4	12	85½	3½	2	¾	4	78
SSW15x7.4	15	85½	3½	2	1	6	91
SSW18x7.4	18	85½	3½	2	1	9	104
SSW21x7.4	21	85½	3½	2	1	12	122
SSW24x7.4	24	85½	3½	2	1	14	134
SSW12x8	12	93¼	3½	2	¾	4	85
SSW15x8	15	93¼	3½	2	1	6	99
SSW18x8	18	93¼	3½	2	1	9	113
SSW21x8	21	93¼	3½	2	1	12	132
SSW24x8	24	93¼	3½	2	1	14	144
SSW12x9	12	105¼	3½	2	¾	4	94
SSW15x9	15	105¼	3½	2	1	6	110
SSW18x9	18	105¼	3½	2	1	9	125
SSW21x9	21	105¼	3½	2	1	12	147
SSW24x9	24	105¼	3½	2	1	14	160
SSW12x10	12	117¼	3½	2	¾	4	104
SSW15x10	15	117¼	3½	2	1	6	121
SSW18x10	18	117¼	3½	2	1	9	138
SSW21x10	21	117¼	3½	2	1	12	162
SSW24x10	24	117¼	3½	2	1	14	177
SSW15x11	15	129¼	5½	2	1	6	148
SSW18x11	18	129¼	5½	2	1	9	167
SSW21x11	21	129¼	5½	2	1	12	193
SSW24x11	24	129¼	5½	2	1	14	209
SSW15x12	15	141¼	5½	2	1	6	160
SSW18x12	18	141¼	5½	2	1	9	180
SSW21x12	21	141¼	5½	2	1	12	208
SSW24x12	24	141¼	5½	2	1	14	225
SSW18x13	18	153¼	5½	2	1	9	194
SSW21x13	21	153¼	5½	2	1	12	224
SSW24x13	24	153¼	5½	2	1	14	243

Figure 1. Table of data for a steel wall product.

## Graphs

Graphs plot a set of points on a set of axes, usually along the horizontal (x) and vertical (y) axes, to show abstract information in an easy to understand way. They visually represent and compare numerical data, and as such are useful for showing trends, cycles, cumulative

changes, relationships between variables, and distributions. Though not as effective as a table in presenting precise data, readers can "see in one image a trend or pattern within a large data set" (Gurak 319). Graphs are better than tables to show the meaning of data.

"Because graphs represent complex data in visual form, they can be powerful and persuasive"(Gurak 322). Therefore, one must be careful when creating graphs that information is not distorted or misrepresented, that resource information is accurate, and that the graph is clear and easy to read (Gurak).

## Guidelines for Creating Graphs

- Ensure the axes are clearly labeled, and that units of scale or measurement are identified (Gurak 323).
- Ensure that axes that do not begin at zero are clearly labeled.
- Ensure that the graph does not distort or modify the trend.
- Indicate the source of data used to construct the graph.
- Explain how the graph supports points discussed in the text.
- Design for simplicity, avoid overuse of colors and typefaces.
- Use software programs such as Microsoft Excel to create graphs.

Graphs should be numbered sequentially, include a title, and an informative caption which identifies the specific purpose of the graph. Warrant the source of the data contained in the graph with a footnote reference. Labels, numbers and letters should each be kept parallel with the horizontal axis.

## Line Graphs

Line or coordinate graphs are plotted using grid lines, with a horizontal axis and a vertical axis. Labels and scales should indicate the quantity, magnitude and range of each axis. The key data lines should be made heavier than grid lines for less important data. Multiple lines can appear in the same chart to show different variables, and should appear in different colors or patterns to differentiate them (Franklin 108).

Line graphs are especially helpful to show several variables relating to one other variable. For example, time is the variable tracked in Figure 15.15, and several types of mortgage rates plotted over time. This creates a clear and simple visual comparison for the reader.

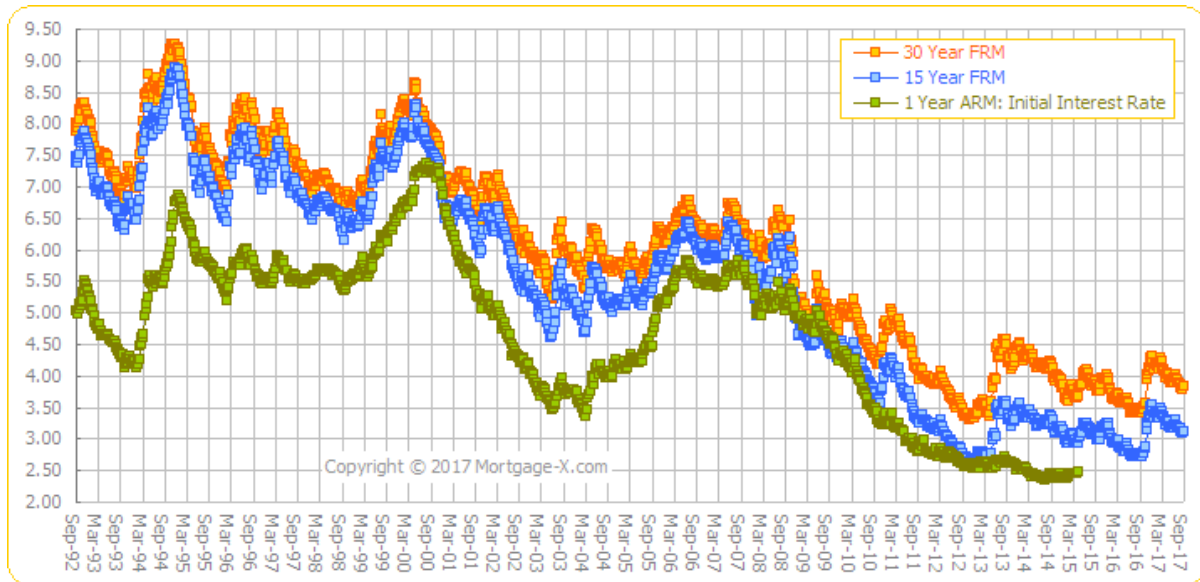


Figure 2. Mortgage interest rates from August 1992 through February 2009

## Bar Graphs

Bar graphs, as the name implies, use colored bars to depict a trend between two or more variables over time. "Most readers are familiar with bar graphs and can quickly grasp quantitative relationships by comparing the heights or lengths of the bars" (Gurak 319).

Bar graphs are not useful if the quantities shown do not differ significantly. Changing the axis scales to dramatize slight differences skews the reader's perception of the data.

Bar graphs can be horizontal or vertical - vertical bar graphs are considered better for showing trends and horizontal bar graphs are considered better for showing magnitude changes (Franklin 111).

Bars should be wider than the gaps between them, different patterns should be used to indicate differences and they should be labeled clearly.

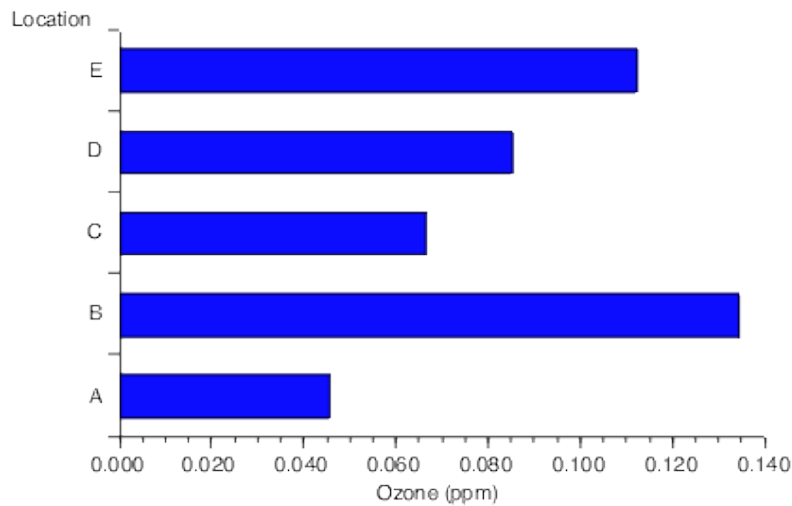


Figure 3. Ozone concentration in locations A through E.

## Pie Graphs

Pie graphs are circles divided into sectors, or slices, to show the relationship of parts to a whole. "Pie charts are often accompanied by numerical data presented as a spreadsheet or table to allow readers to explore the displayed information in more detail" (Gurak 271).

The sectors must add up to 100 percent. Pie graphs are useful for general comparisons of relative size, but they are not useful if accuracy is important. They are also not useful for showing a large number of items. Different colors and/or fill patterns should be used for adjacent pie sectors. Small percentage items should be grouped under a general label such as "Other" (Franklin 113).

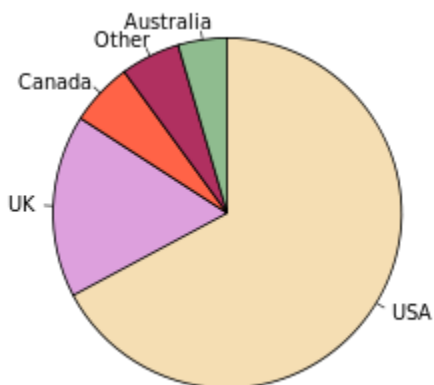


Figure 4. Pie Chart of populations of English native speakers.

## Maps



Maps, both 2D and 3D, represent many purposes from simple road maps to visualizing complex numerical data. "The design and content of a map depends on the purpose and type of map being constructed, the conventions for that type of map, and the audience using it" (Gurak 324).

To map sequential data, it is best to use gradations of one or two colors to show gradations in the data. But, to show differences "in kind rather than in amount", many colors may be used; choose colors that are easily distinguished from one another (Gurak 325- 326).

## Charts

Charts are some of the most valuable and frequently used types of graphics. Charts have several conflicting definitions, depending on the resource consulted. For the purposes of our Style Guide, we will follow the style supported by the *Franklin Covey Style Guide for Business and Technical Communication*. Charts are graphs that do not rely on numerical interpretations, including organizational charts, flow charts, and schedule charts. The purpose of the chart, the audience, the medium, and the data and ideas being conveyed in the document should determine the best type of chart to use, rather than adhering to a hard rule (Franklin 42).

A chart is only as good as the effect it creates. A chart should only be included if it communicates information quickly and simply. Charts should be integrated with the text and convey information more dramatically than is possible without their use. A chart can both replace text and provide a visual road map that readers can use as they read through dense and complex material. Charts also provide a visual, which can aid recall. Flow charts, organization charts or scheduling charts should be used to help readers visualize the major points in a document.

## Guidelines for Creating Charts

- Ensure the chart is consistent with how the audience will view the data.
- Design the chart so that it shows one primary idea or specific relationship.
- Keep the chart simple and clear; do not include too much information.
- Use clear, concise labels and titles; do not include too much text.
- Ensure that the information is not distorted or misleading.
- Use software programs such as Microsoft Excel to create charts.
- Ensure the chart is easily read from one-page orientation.

Sequentially number and label all charts the same as other graphics contained within a document. Do not have a separate numbering scheme for charts. Place footnotes and warranting evidence below a chart.

## Flowchart

A flowchart is a common type of chart, representing an algorithm or process, and showing the steps as boxes of various kinds, and their order by connecting these with arrows. Flowcharts are used in analyzing, designing, documenting or managing a process or program in various fields.

There are many different types of flowcharts for different users (such as analysts, designers, engineers, managers, or programmers) representing different types objects.

### Four General Types of Flowcharts (Sterneckert)

- **Document**
  - shows document flow through system
- **Data**
  - shows data flows in a system
- **System**
  - shows controls at a physical or resource level
- **Program**
  - shows the controls in a program within a system (Business)

### Features of a Flow Chart (Gurak 273)

- Each step in the process is represented by a shape.
- Decision steps are labeled in the form of a question. Different paths may be taken depending upon the answer to the question.

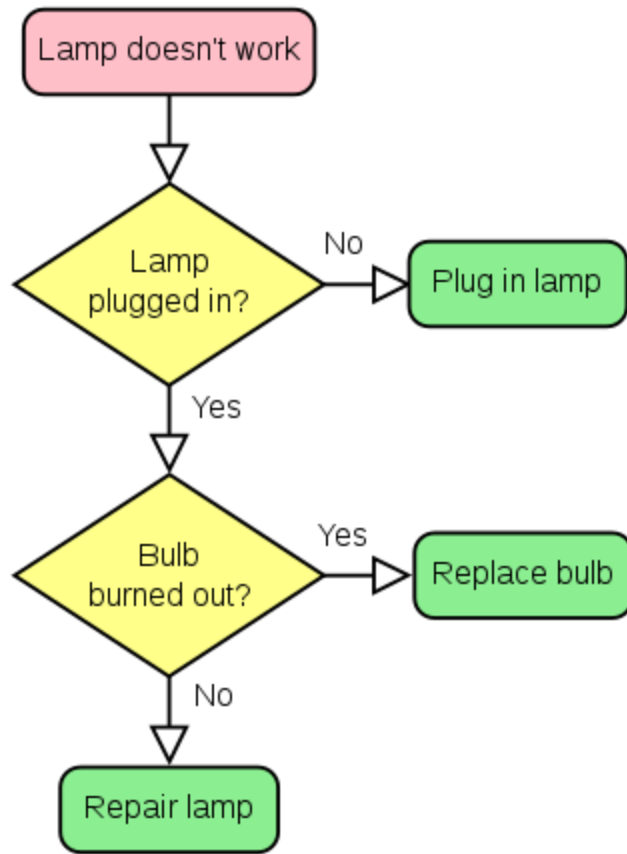


Figure 5. Flowchart representing steps for troubleshooting a broken lamp.

## Organizational Chart

Organizational charts help readers visualize the structure and internal relationships of units or individuals within an organization.

Organizational Charts Typically Show:

- divisions and subdivisions of the organization,
- hierarchy and relationship of the groups to one another,
- lines of responsibility and authority, where solid lines indicate direct lines of control, and
- lines of communication and coordination through the use of dashed lines.

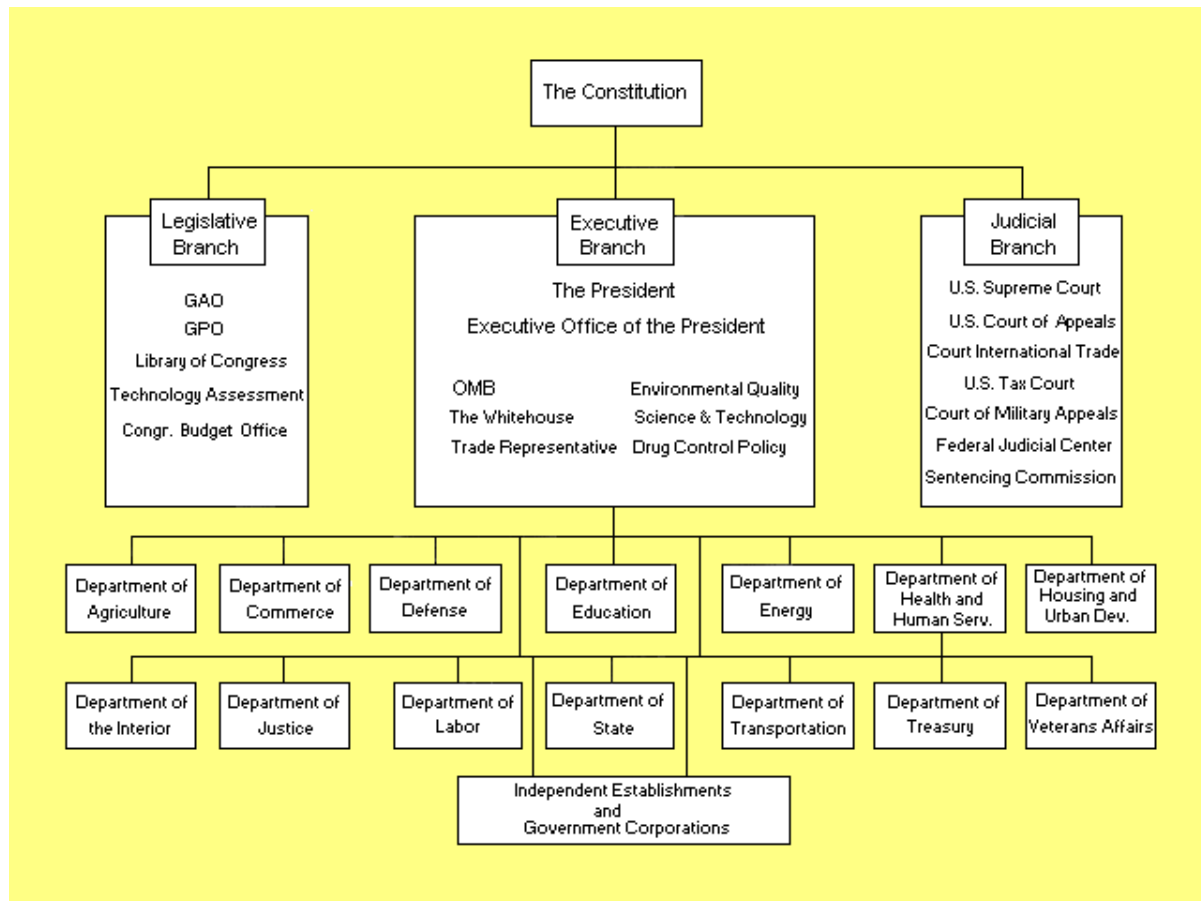


Figure 6. Organizational chart of the US government.

## .Scheduling Chart

A common project task is to schedule a series of events; the complexity of this task can vary considerably depending on how many steps are involved in the process. Some common challenges are:

- Resource Scheduling or the scheduling of people to work on and resources required by tasks.
- Dealing with uncertainties in the estimates of the duration of each task.
- Arranging tasks to meet various deadlines.
- Juggling multiple projects simultaneously to meet a variety of requirements (Franklin 47).

A scheduling chart visually illustrates the steps and their dependencies in a process. There are several types of commonly used scheduling systems.

## Examples of Scheduling Systems

- Gantt,
- MindMapper,
- Fixed Point Chart (FPC), and
- PERT (Program Evaluation and Review Technique) (Evaluation).

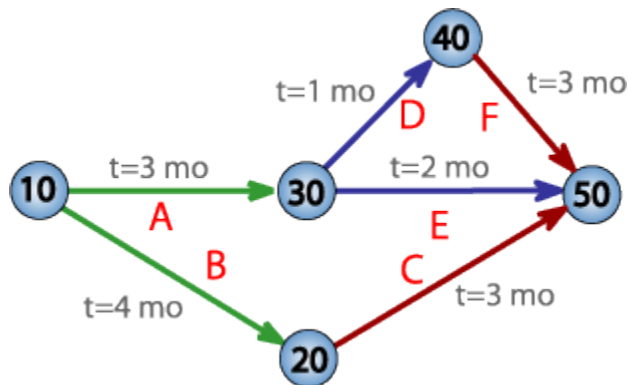


Figure 7. PERT Network Chart for a seven-month project with five milestones (10 through 50) and six activities (A through F).

## Photographs

Using photographs in technical documentation conveys realism and gives the document credibility. While current technology allows complete manipulation of a photograph, readers still like the realism a photo provides. Information about size and scale should remain constant throughout a set of related images - scale should be constant (E. Tufte, Visual Graphics 25).

Photographs are used to show a reader what is - or what can be - rather than conveying a concept. Selection of a photograph should always be done after text is written. Match the message you want to convey to the text as closely as possible. All photographs need to support the message - a project should have several photographs for each message, from different sources, from which to choose. Budget allowing, color photographs are preferred, unless your text has been written to convey a historical message and the use of sepia tones or black and white images enhances your message (Franklin 231).

Representational illustrations include many types of graphics such as diagrams and drawings of actual products that allow a reader to see what they look like in concept, or to see inside the product to places that are usually hidden or not viewable. These help the reader to visualize an idea or a relationship. Even rough sketches convey information better than words in many instances.

## Types of Representational Illustrations

- technical illustrations,
- exploded-view drawings,
- cutaway drawings, and
- symbols and icons.

All types of illustrations should always be kept as simple as possible, with color used to enhance them. Sometimes in technical communications, full color may not be an option. In this case, working with two colors is preferred. The second color can highlight specific areas of an illustration to bring the reader's attention to that area.

Each illustration should be clearly labeled, with parts of the object shown.

When adding a series of illustrations, the viewing angle should be consistent for each figure.

All letters and numbers on the illustration should be numbered so they can be read without reorienting the book or manual. In a drawing showing a process, the flow of the process should read left-to-right (Franklin 120).

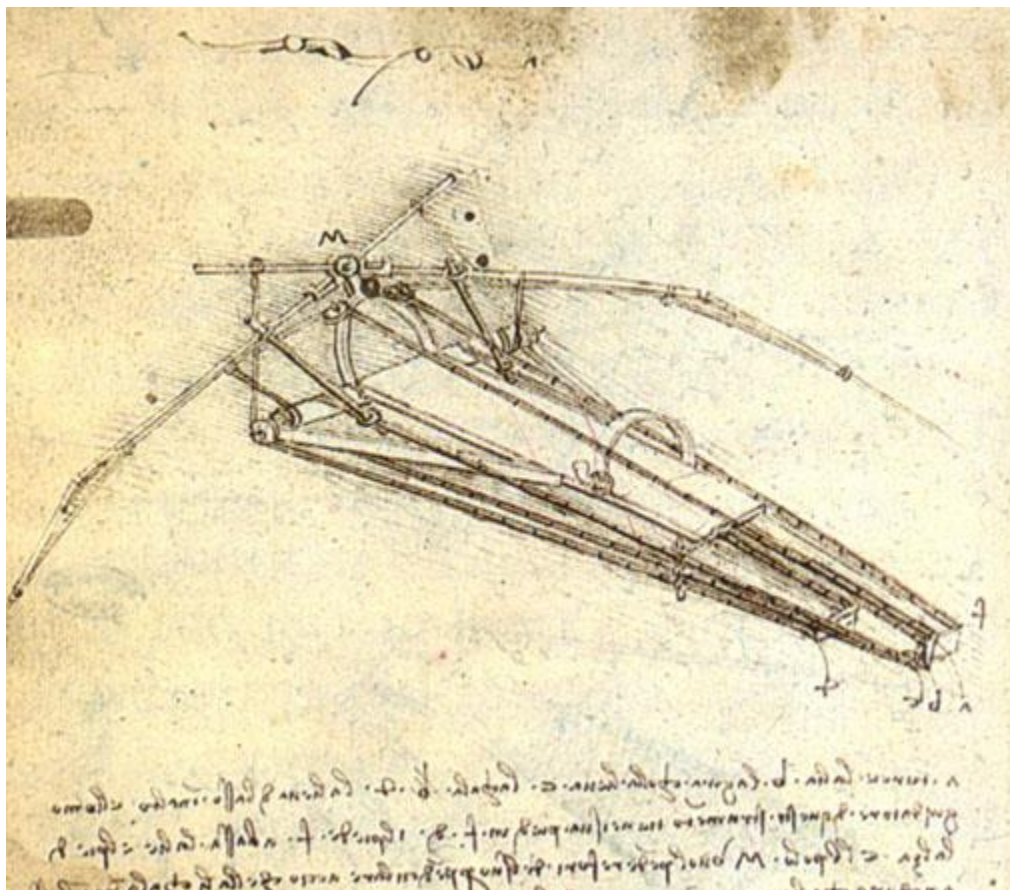


Figure 8. Illustration of a flying machine, by Leonardo da Vinci.

## Technical Illustrations

Technical illustration is the use of illustration to visually communicate information of a technical nature. Technical illustrations can be component technical drawings or diagrams that aim to generate expressive images to effectively convey certain information visually to both technical and non-technical audiences. The visual image should be accurate in terms of dimensions and proportions, and should provide an overall impression of what an object is or does, to enhance the reader's understanding.

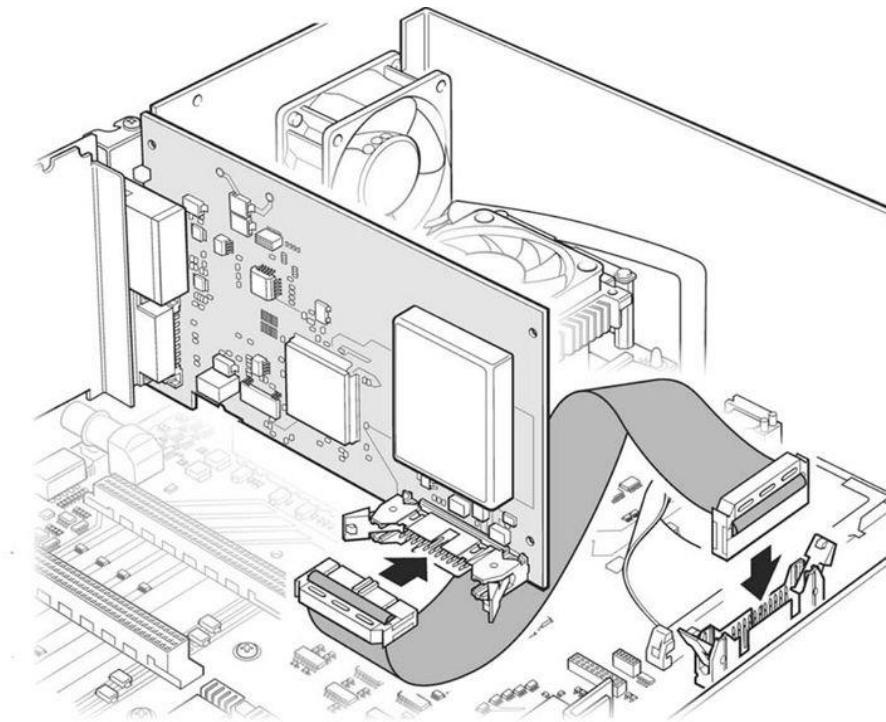


Figure 9. Technical illustration of an interface card conveying placement of the interface cable.

## Exploded View Drawings

An exploded view, or assembly, drawing is a diagram, picture or technical drawing of an object showing the relationship or order of assembly of various parts.

The components of an object are shown slightly separated by distance - as if there had been a small controlled explosion emanating from the middle of the object, causing the object's parts to be separated an equal distance away from their original locations.

The exploded drawing is used in parts catalogs, assembly and maintenance manuals and other instructional material (Exploded).



## Cutaway Drawings

A cutaway drawing, also called a cutaway diagram, is a 3D graphic, drawing, diagram and/or illustration, in which surface elements are selectively removed to make internal features visible, without sacrificing the outer context entirely (Cutaway).

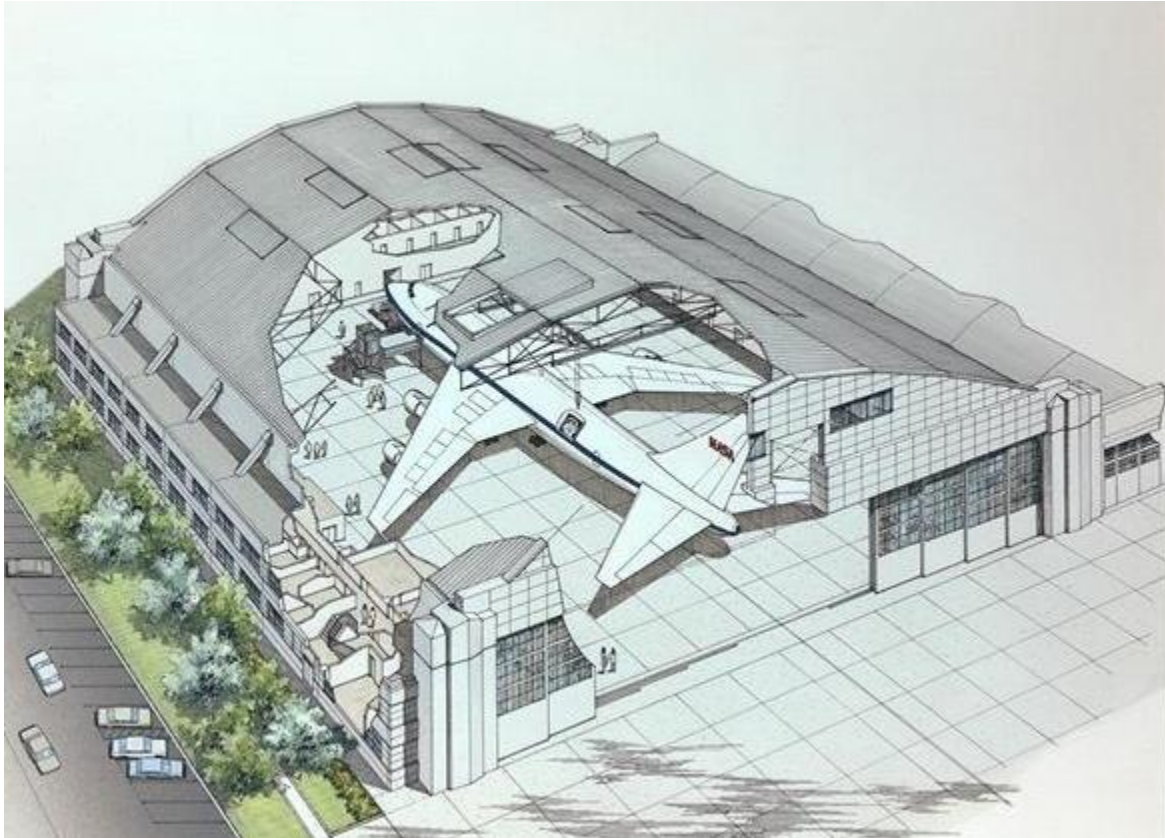


Figure 10. Airplane hangar, showing exterior with cutouts to expose interior.

## Symbols and Icons

Symbols and icons are very valuable technical communication tools in the global marketplace. Many symbols are considered "internationally recognized" and are used on signs in airports, train stations, and hospitals. These symbols are also used in manuals developed for international audiences. Incorporating symbols and icons into technical documentation can considerably reduce the number of words to describe something.





Figure 11. Recycling symbol.

Other types of graphics that may be used to add interest or humor to a document are clip art and cartoons.

## Cartoons

Cartoons are drawn visuals that engage an audience through humor. Cartoons can be used to:

- Introduce a general topic in a report or other document.
- Provide a funny example to make a difficult topic understandable.
- Connect with the audience to 'break the ice'.

"Humor, when used appropriately, offers an effective emotional appeal for persuasion. Showing a sense of humor can also build rapport with audiences" (Gurak 268).

To use humor effectively, the audience must not be offended, and must be able to see themselves in the situation. To do this, editors need to know their audience well. Because humor does not translate well across cultures, it is best to **not** use humor in international venues.

Cartoons can be found on newspaper and magazine websites as well as *Comics.com* and *Slate.com*. Be sure to cite the comic or source of the cartoon; and if the terms require, obtain the necessary permissions (Gurak). Audiences enjoy comic strips like Dilbert, "Because it reveals the absurd realities of many workplaces" (Gurak 269).

## Clip Art

Clip Art is the simple, informal artwork associated with software programs like Word, or on the Web, or in clip art books. It is not necessarily humorous, and can be used to add interest to a document. It can also be used to highlight document text or guide the reader through

the document. But like other graphics, it must be kept to a minimum so as not to look unprofessional.

## Screen Captures

Screen captures are very helpful in technical documentation because they show the reader what an application looks like, rather than telling them. Seeing the actual screen is much more useful than describing it with words. Screen capture software may allow sections of a screen to be circled or numbered. Written instructions referring to these circles and numbers can help guide a user through a complex process.

## How to Write a Research Paper | A Beginner's Guide

A research paper is a piece of [academic writing](#) that provides analysis, interpretation, and argument based on in-depth independent research.

Research papers are similar to [academic essays](#), but they are usually longer and more detailed assignments, designed to assess not only your writing skills but also your skills in scholarly research. Writing a research paper requires you to demonstrate a strong knowledge of your topic, engage with a variety of sources, and make an original contribution to the debate.

This step-by-step guide takes you through the entire writing process, from understanding your assignment to proofreading your final draft.

### 1. Understand the assignment

Completing a research paper successfully means accomplishing the specific tasks set out for you. Before you start, make sure you thoroughly understand the assignment task sheet:

- Read it carefully, looking for anything confusing you might need to clarify with your professor.
- Identify the assignment goal, deadline, length specifications, formatting, and submission method.
- Make a bulleted list of the key points, then go back and cross completed items off as you're writing.

Carefully consider your timeframe and word limit: be realistic, and plan enough time to research, write and edit.

### 2. Choose a research paper topic

There are many ways to [generate an idea](#) for a research paper, from brainstorming with pen and paper to talking it through with a fellow student or professor.

You can try free writing, which involves taking a broad topic and writing continuously for two or three minutes to identify absolutely anything relevant that could be interesting.

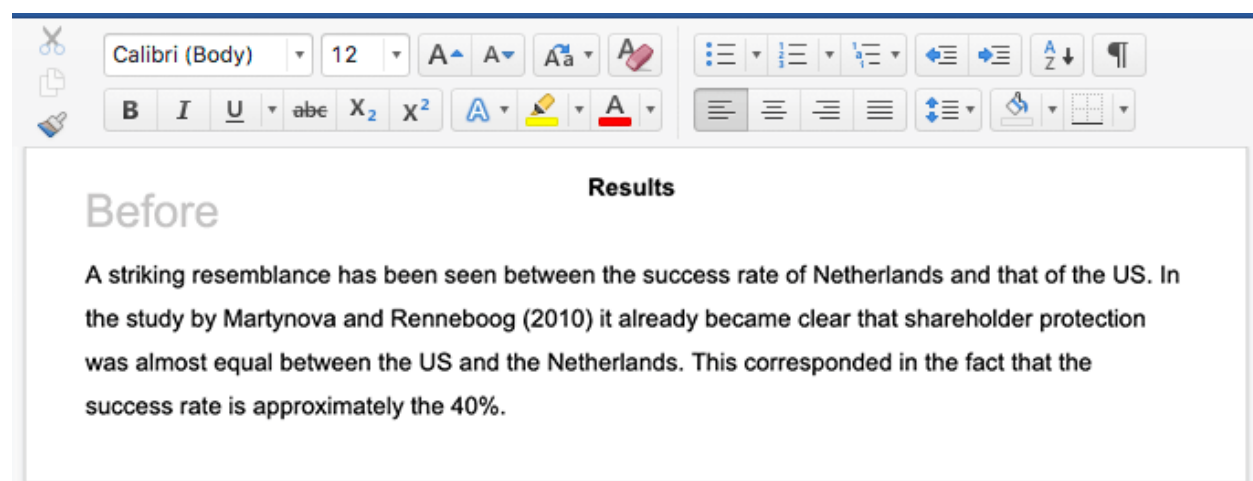
You can also gain inspiration from other research. The discussion or recommendations sections of research papers often include ideas for other specific topics that require further examination.

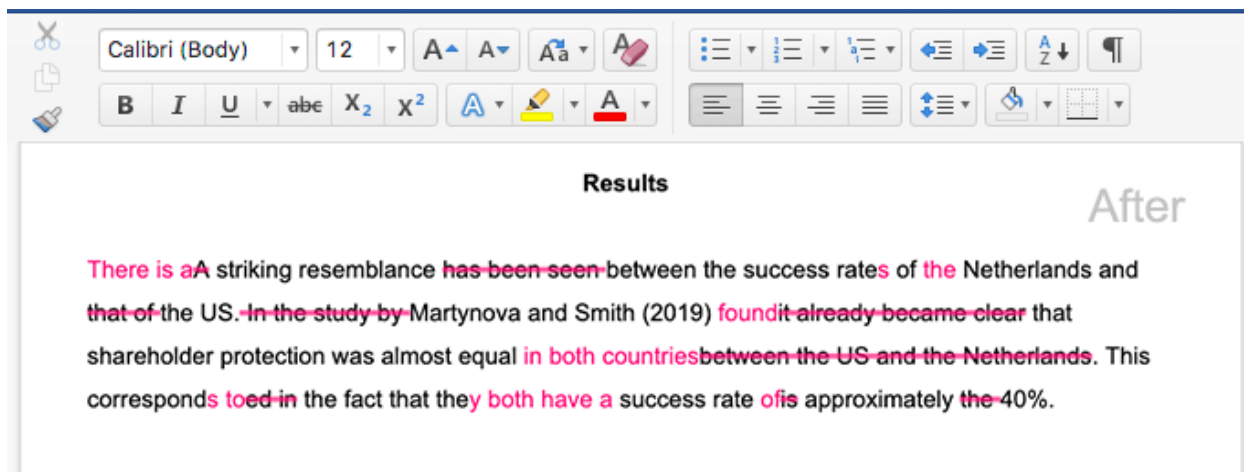
Once you have a broad subject area, narrow it down to choose a topic that interests you, meets the criteria of your assignment, and is possible to research. Aim for ideas that are both original and specific:

- A paper following the chronology of World War II would not be original or specific enough.
- A paper on the experience of Danish citizens living close to the German border during World War II would be specific and could be original enough.

## What can proofreading do for your paper?

Scribbr editors not only correct grammar and spelling mistakes, but also strengthen your writing by making sure your paper is free of vague language, redundant words and awkward phrasing.





[See editing example](#)

### 3. Conduct preliminary research

Note any discussions that seem important to the topic, and try to find an issue that you can focus your paper around. Use a variety of [sources](#), including journals, books and reliable websites, to ensure you do not miss anything glaring.

Do not only verify the ideas you have in mind, but look for sources that contradict your point of view.

- Is there anything people seem to overlook in the sources you research?
- Are there any heated debates you can address?
- Do you have a unique take on your topic?
- Have there been some recent developments that build on the extant research?

In this stage, you might find it helpful to formulate some [research questions](#) to help guide you. To write research questions, try to finish the following sentence: “I want to know how/what/why...”

### 4. Develop a thesis statement

A [thesis statement](#) is a statement of your central argument — it establishes the purpose and position of your paper. If you started with a research question, the thesis statement should answer it. It should also show what evidence and reasoning you’ll use to support that answer.

The thesis statement should be concise, contentious, and coherent. That means it should briefly summarize your argument in a sentence or two; make a claim that requires further evidence or analysis; and make a coherent point that relates to every part of the paper.

You will probably revise and refine the thesis statement as you do more research, but it can serve as a guide throughout the writing process. Every paragraph should aim to support and develop this central claim.

## 5. Create a research paper outline

A [research paper outline](#) is essentially a list of the key topics, arguments and evidence you want to include, divided into sections with [headings](#) so that you know roughly what the paper will look like before you start writing.

A structure outline can help make the writing process much more efficient, so it's worth dedicating some time to create one.

## 6. Write a first draft of the research paper

Your first draft won't be perfect — you can polish later on. Your priorities at this stage are as follows:

- Maintaining forward momentum — write now, perfect later.
- Paying attention to clear organization and [logical ordering](#) of paragraphs and sentences, which will help when you come to the second draft.
- Expressing your ideas as clearly as possible, so you know what you were trying to say when you come back to the text.

You do not need to start by writing the introduction. Begin where it feels most natural for you — some prefer to finish the most difficult sections first, while others choose to start with the easiest part. If you created an outline, use it as a map while you work.

Do not delete large sections of text. If you begin to dislike something you have written or find it doesn't quite fit, move it to a different document, but don't lose it completely — you never know if it might come in useful later.

## Paragraph structure

[Paragraphs](#) are the basic building blocks of research papers. Each one should focus on a single claim or idea that helps to establish the overall argument or purpose of the paper.

Here is an example of a well-structured paragraph. Hover over the sentences to learn more.

## Example paragraph

George Orwell's 1946 essay "Politics and the English Language" has had an enduring impact on thought about the relationship between politics and language. This impact is particularly obvious in light of the various critical review articles that have recently referenced the essay. For example, consider Mark Falcoff's 2009 article in The National Review Online, "The Perversion of Language; or, Orwell Revisited," in which he analyzes

several common words (“activist,” “civil-rights leader,” “diversity,” and more). Falcoff’s close analysis of the ambiguity built into political language intentionally mirrors Orwell’s own point-by-point analysis of the political language of his day. Even 63 years after its publication, Orwell’s essay is emulated by contemporary thinkers.

## Citing sources

It’s also important to keep track of citations at this stage to [avoid accidental plagiarism](#). Each time you use a source, make sure to take note of where the information came from.

You can use our free citation generators to automatically create citations and save your reference list as you go.

[APA Citation Generator](#) [MLA Citation Generator](#)

## 7. Write the introduction

The [research paper introduction](#) should address three questions: What, why, and how? After finishing the introduction, the reader should know what the paper is about, why it is worth reading, and how you’ll build your arguments.

**What?** Be specific about the topic of the paper, introduce the background, and define key terms or concepts.

**Why?** This is the most important, but also the most difficult, part of the introduction. Try to provide brief answers to the following questions: What new material or insight are you offering? What important issues does your essay help define or answer?

**How?** To let the reader know what to expect from the rest of the paper, the introduction should include a “map” of what will be discussed, briefly presenting the key elements of the paper in chronological order.

## 8. Write a compelling body of text

The major struggle faced by most writers is how to organize the information presented in the paper, which is one reason an [outline](#) is so useful. However, remember that the outline is only a guide and, when writing, you can be flexible with the order in which the information and arguments are presented.

One way to stay on track is to use your [thesis statement](#) and [topic sentences](#). Check:

- topic sentences against the thesis statement;
- topic sentences against each other, for similarities and logical ordering;
- and each sentence against the topic sentence of that paragraph.

Be aware of paragraphs that seem to cover the same things. If two paragraphs discuss something similar, they must approach that topic in different ways. Aim to create smooth [transitions](#) between sentences, paragraphs, and sections.

## 9. Write the conclusion

The [research paper conclusion](#) is designed to help your reader out of the paper's argument, giving them a sense of finality.

Trace the course of the paper, emphasizing how it all comes together to prove your thesis statement. Give the paper a sense of finality by making sure the reader understands how you've settled the issues raised in the introduction.

You might also discuss the more general consequences of the argument, outline what the paper offers to future students of the topic, and suggest any questions the paper's argument raises but cannot or does not try to answer.

You **should not**:

- Offer new arguments or essential information
- Take up any more space than necessary
- Begin with stock phrases that signal you are ending the paper (e.g. "In conclusion")

## 10. The second draft

There are four main considerations when it comes to the second draft.

1. Check how your vision of the paper lines up with the first draft and, more importantly, that your paper still answers the assignment.
2. Identify any assumptions that might require (more substantial) justification, keeping your reader's perspective foremost in mind. Remove these points if you cannot substantiate them further.
3. Be open to rearranging your ideas. Check whether any sections feel out of place and whether your ideas could be better organized.
4. If you find that old ideas do not fit as well as you anticipated, you should cut them out or condense them. You might also find that new and well-suited ideas occurred to you during the writing of the first draft — now is the time to make them part of the paper.

## 11. The revision process

The goal during the revision and [proofreading](#) process is to ensure you have completed all the necessary tasks and that the paper is as well-articulated as possible.

## Global concerns

- Confirm that your paper completes every task specified in your assignment sheet.
- Check for logical organization and flow of paragraphs.
- Check paragraphs against the introduction and thesis statement.

## Fine-grained details

Check the content of each paragraph, making sure that:

- each sentence helps support the topic sentence.
- no unnecessary or irrelevant information is present.
- all technical terms your audience might not know are identified.

Next, think about [sentence structure](#), grammatical errors and [formatting](#). Check that you have correctly used [transition words and phrases](#) to show the connections between your ideas. Look for typos, cut unnecessary words and check for consistency in aspects such as [heading formatting](#) and [spellings](#).

Finally, you need to make sure your paper is correctly formatted according to the rules of the [citation style](#) you are using. For example, you might need to include an [MLA heading](#) or create an [APA title page](#).

## Research paper checklist

### Checklist: Research paper

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- I have followed all instructions in the assignment sheet.
- My [introduction](#) presents my topic in an engaging way and provides necessary background information.
- My introduction presents a clear, focused [research problem](#) and/or [thesis statement](#).
- My paper is logically organized using [paragraphs](#) and (if relevant) [section headings](#).
- Each paragraph is clearly focused on one central idea, expressed in a clear [topic sentence](#).
- Each paragraph is relevant to my research problem or thesis statement.
- I have used appropriate [transitions](#) to clarify the connections between sections, paragraphs, and sentences.
- My [conclusion](#) provides a concise answer to the research question or emphasizes how the thesis has been supported.
- My conclusion shows how my research has contributed to knowledge or understanding of my topic.
- My conclusion does not present any new points or information essential to my argument.
- I have provided an [in-text citation](#) every time I refer to ideas or information from a source.
- I have included a reference list at the end of my paper, consistently formatted according to a specific [citation style](#).
- I have thoroughly [revised](#) my paper and addressed any feedback from my professor or supervisor.
- I have followed all formatting guidelines (page numbers, headers, spacing, etc.).



## **Editing and Revising**

Writing is an iterative process and it is unlikely that your first draft will be perfect. It is important therefore that you leave time to edit, revise and proofread your own work.

### **Why edit?**

It is useful to think about writing and editing as two separate activities.

When you write your first draft you need to free yourself up to explore, develop and try out new ideas and approaches. Your work will grow naturally and will be less structured and more expansive. Worrying too much about editing at this stage may slow your progress and restrict your thinking. You can refine and perfect later on.

Editing is about checking for sense, accuracy and structure. It is a positive rather than a destructive process, as you are perfecting what you have already written.

### **What am I looking for?**

When you edit your work you should ask yourself:

- Is it clear and readable?
- Is there a coherent and logical argument?
- Does it respond to the question or task?
- Does it stay on topic?
- Is it structured to help guide the reader smoothly through your argument?
- Does it stay within any word counts?

## Stick to the question

Before you start looking at the detail, make sure you set aside time to read your work from start to finish. Your work needs to work as a whole, and you need to have a clear picture of where you introduce, develop and conclude the central argument.

A read through will also highlight any areas where you are repetitive, unclear, or wander off topic.

Keep referring back to the question or task. Make sure your work stays focussed and that the structure helps guide the reader through your argument logically.

If it is difficult to follow your argument, look for how you structure your paragraphs and insert signposts or linking words or phrases to move the argument along.

## Editing tips

To make it easier for you to edit, we suggest that you:

- build the editing into your overall plan and timings
- leave a day between edits so you can look again at the content with fresh eyes
- Read it from your audience's point of view. Giving yourself time away from the material will help as you won't feel as close to it.

## What is Referencing?

Referencing is how you acknowledge the source of the information you have used (referred to) in your work. It helps to make clear to the reader how you have used the work of others to develop your own ideas and arguments.

Whether you are quoting directly from a book, summarising an idea from a journal article, illustrating a point with an image, or paraphrasing an opinion from a newspaper article, you need to give credit to the original creator of the work.

Sometimes the words used to describe referencing can be confusing, especially as they are often used interchangeably. To keep things simple, here is a quick summary of key referencing terms:

**Citation:** this is an acknowledgement that you place in your writing at the point you have referred to someone else's work. It may be in the author-date format (e.g., Jones, 2020) or in numeric format (e.g. [1].)

**Reference:** each citation should have a corresponding reference, which provides further details about the source of information you have used. This may include the creator's name, date of publication, title of the work, publisher details and a URL if accessed online. References are usually placed at the end of your writing in a **reference list**.

### **Why do you need to reference?**

Referencing is important for the integrity and quality of your academic writing. Here's why:  
Referencing:

- gives authority to your work by showing the breadth of your reading
- shows the reader how you have developed your arguments and engaged with the ideas of others
- enables a reader to see the original sources that you've used; they can follow up on your references so they can learn more about the ideas you've discussed in your work or check any facts and figures
- allows others to use your work as a research source (for which you should be cited!)
- makes clear which ideas are your own and those inspired by others; this enables you to avoid plagiarism

The quality of your referencing can affect the marks you're given for assessments, so it's worth taking the time to get them right.

### **Definition of Reference**

Reference can be understood as the act of giving credit to or mentioning the name of, someone or something. In research methodology, it denotes the items which you have reviewed and referred to, in the text, in your research work. It is nothing but a way to acknowledge or indirectly showing gratitude, towards the sources from where the information is gathered.

While using references, one thing is to be noted that you go for reliable sources only, because it increases credence and also supports your arguments. It may include, books, research papers, or articles from

magazines, journals, newspapers, etc., interview transcripts, internet sources such as websites, blogs, videos watched, and so forth.

These are used to inform the reader about the sources of direct quotations, tables, statistics, photos etc. that are included in the research work.

### Definition of Bibliography

At the end of the research report, bibliography is added, which contains a list of books, magazines, journals, websites or other publications which are in some way relevant to the topic under study, that has been consulted by the researcher during the research. In finer terms, it comprises of all the references cited in the form of footnotes and other important works that the author has studied.

The bibliography is helpful to the reader in gaining information regarding the literature available on the topic and what influenced the author. For better presentation and convenient reading, the bibliography can be grouped into two parts, wherein the first part lists out the names of books and pamphlets consulted, and the other contains the names of magazines and newspapers considered.

### Types of Bibliography

- **Bibliography of works cited:** It contains the name of those books whose content has been cited in the text of the research report.
- **Selected Bibliography:** As it is evident from the name itself, selected bibliography covers only those works which the author assumes that are of major interest to the reader.
- **Annotated Bibliography:** In this type of bibliography, a small description of the items covered is given by the author to ensure readability and also improve the usefulness of the book.

### Comparison Chart

BASIS FOR COMPARISON	REFERENCE	BIBLIOGRAPHY
Meaning	Reference implies the list of sources, that has been referred in the research work.	Bibliography is about listing out all the materials which has been consulted during the research work.
Based on	Primary Sources	Both Primary and Secondary Sources
Arrangement	Alphabetically and numerically	Numerically
Includes	Only in-text citations, that have been used in the assignment or project.	Both in-text citations and other sources, that are used to generate the idea.
Supporting argument	A reference can be used to support an argument.	A bibliography cannot be used to support an argument.
Used for	Thesis and Dissertation	Journal Papers and Research work

What should you include in a bibliography?

We recommend compiling your bibliography as you study. Whether or not you directly reference sources, if you use them as part of your studies, they should be included. By collecting this information and

building your bibliography as you go, you'll find it far less stressful and one less thing to worry about.

### **Information required for referencing printed sources:**

- The name of the author.
- The title of the publication or article.
- The date of publication.
- The page number in the book where the citation can be found.
- The name of the publishing company.
- If you're referencing a magazine or printed encyclopedia, record the volume number.

### **Information required for referencing web sources:**

- The name of the author or editor.
- The title of the webpage.
- The company that created the webpage.
- The URL of the piece.
- The last date you visited the webpage.

### **Where to find this information**

The information you need to include in your bibliography will be located in different places, which can be pretty frustrating, particularly if you've left your referencing to the last minute. However, there are a few specific places where this information is likely to be found:

- The contents page (for magazine or journal articles).
- The first, second or editorial page (for newspapers).
- The header or footer of the webpage.
- The contact, or about, page of the website.

What are the different bibliography styles?

In addition to structuring your bibliography correctly, depending on whether your source is a book, magazine, newspaper or webpage, you need to find out what bibliographic style is required.

Different course tutors will ask for a specific referencing style. This means that you simply present your source information in a different order.

There are four main styles that you might be asked to follow: MLA, APA, Harvard or MHRA, and the chosen style will change your reference order:

### **MRL reference order**

1. Full name of the author (last name first).
2. The title of the book.
3. Publication place.
4. The name of the book publisher.
5. The publication date.

### **APA/Harvard reference order**

1. If using Harvard referencing, title your bibliography as 'References'.
2. Author's last name.
3. Author's first initial.
4. The publication date (in brackets).
5. The book title.
6. The publication place.
7. The name of the book publisher.

### **MHRA reference order**

1. Author's first and last name
2. The title of the book
3. Publication place.
4. The name of the book publisher.
5. The publication date

Points three to five should all be included in the same bracket.

How to write a bibliography

Whatever the style needed for your bibliography, there are some simple rules to follow for success:

1. Collect citation information as you go.
2. All citations must be listed alphabetically using the author's last name (if using the MHRA style, use the author's first name).
3. If you can't source the author's name, alphabetise using the book or article title.
4. If there are multiple authors of an article or book, alphabetise by the first author.
5. Consistency is key. All the information must be listed in exactly the same way.
6. Each source should begin on a new line.
7. Bibliographies should be placed at the end of your assignment.