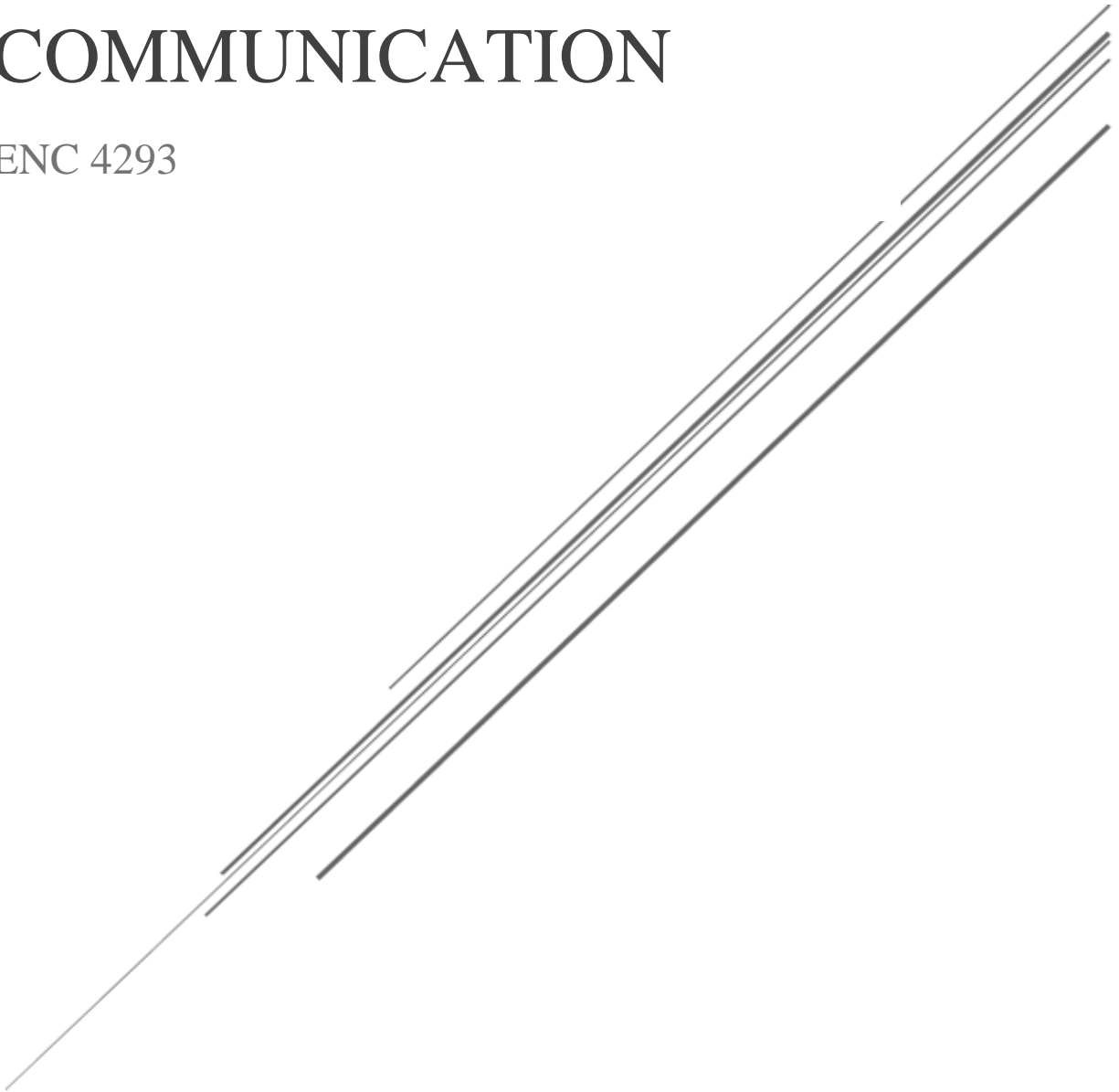




# TECHNICAL COMMUNICATION

ENC 4293



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# Introduction

In both academic and professional contexts, the ability to write effectively is a crucial skill that demands continuous development. Central to this development is the understanding and application of style guides, which ensure documents adhere to specific formats and maintain high quality. These guides provide a framework for consistency and clarity, crucial for effective communication. Many companies, particularly in fields like government or medicine, have stringent style requirements to ensure information is presented clearly and professionally. Students will be better prepared to generate professional-quality documents that reflect favorably on both themselves and their companies the sooner they understand the significance of these recommendations.

Beyond content and format, a comprehensive style guide also incorporates the social responsibilities of writing. Effective writing is more than just arranging words; it is a form of social interaction that necessitates awareness of intercultural nuances, ethical considerations, and accessibility issues. By integrating these elements, writers can ensure their work is not only technically proficient but also socially responsible, fostering a meaningful dialogue with their readers. The ENC 4293 class of summer 2024 style guide encapsulates this holistic approach, aiming to prepare writers for the multifaceted challenges of both academic and professional writing.

# **Grammar**

## **Introduction**

This chapter discusses the fundamentals of grammar and how they are essential for effective communication in any context, whether academic, professional, or casual. Understanding Grammar is fundamental and very important. This chapter provides information to UCF students and its staff about the fundamentals of grammar.

## **Grammar Fundamentals**

Grammar provides structure and guidelines. This will help UCF students and staff express themselves precisely and concisely. Parts of speech, usage, and structures are all vital in determining how we communicate and engage with one another effectively. Understanding these grammatical elements ensures that the writer's message is exact and interesting. It also facilitates lucid and effective communication.

## **Parts of Speech**

The fundamental key components of grammar constitute parts of speech, and they classify words according to how they are used in sentences. Some aspects of parts of speech include adjectives, adverbs, prepositions, conjunctions, interjections, nouns, pronouns, and verbs. For sentences to be significant and consistent, it is essential to comprehend and use these components of speech appropriately.

## **Usage and Structure**

This requires knowing the differences between simple, compound, complex, and compound-complex sentences and how to utilize clauses and phrases properly. This can result in UCF students and staff creating sentences that are grammatically correct, clear, succinct, and interesting by learning usage and structure. This allows for more effective

communication in speech and writing for UCF students and staff. Students and staff at UCF can ensure that communication is precise and clear by adhering to the established guidelines. Sentence structure is one of the main aspects of grammar. It involves using words and phrases to create sentences that make sense.

## **Parts of Speech**

### ***Nouns***

Nouns are words that identify something. They can identify things, people, and places. They can be used in conjunction with many other types of words as well to enhance the noun. Nouns are most commonly used alongside verbs. Nouns can also be modified in the plural form and to be possessive.

### ***Common Nouns***

A common noun refers to a person, place, or thing.

Examples:

orange, park, boss

### ***Proper Nouns***

A proper noun refers to a specific person, place, or thing.

Examples:

Bilbo Baggins, Lord of the Rings, Mordor

### ***Abstract Nouns***

An abstract noun refers to something unseen or untouchable.

Examples:

courage, payday, empathy

## ***Concrete Nouns***

A concrete noun refers to something one can see or touch.

Examples:

The park's fence, the customer's money

## ***Compound Nouns***

A compound noun refers to a group of nouns conjoined naturally or through the use of a hyphen for the creation of a single noun.

Examples:

Handbag, high school, daughter-in-law, self-esteem

## ***Collective Nouns***

A collective noun is a common noun that refers to a group of people and things.

Examples:

Community, gaggle, audience, set

## ***Gender-Specific Nouns***

A gender-specific noun refers to something associated with being male or female.

Examples:

Boy and girl

Aunt and uncle

Mother and father

## **Pronouns**

Pronouns are words that are capable of taking the place of a noun in a sentence.

### ***Demonstrative Pronouns***

A demonstrative pronoun tells the reader whether the noun it represents is singular or plural. It also tells the reader whether the noun is near or far.

Examples:

Let me help you with that!

Can you bring this inside?

### ***Indefinite Pronouns***

An indefinite pronoun is a way to refer to a person or thing in a nonspecific way.

Examples:

Somebody forgot to feed the birds.

We are all in trouble today.

### ***Interrogative Pronouns***

An interrogative pronoun is one used in questions. It takes the place of a noun in a non-obvious way.

Examples:

Who is your boss?

Whose fish is this?

## ***Personal Pronouns***

Personal pronouns replace nouns that refer to a person or people.

Examples:

I saw birds at the park.

He went to the front desk.

She ate at the grill house.

They saw a movie with them.

## ***Possessive Pronouns***

A possessive pronoun represents a noun as well as saying who owns the noun.

Example:

Those dogs over there are mine.

## ***Relative Pronouns***

A relative pronoun heads a relative clause, adding more information to a sentence.

Example:

Bruce, the guy who pushed me down the stairs, got a call from HR.

## ***Reciprocal Pronouns***

A reciprocal pronoun is used for actions or feelings that are reciprocated.

Example:

They love each other.

## ***Reflexive Pronouns***

A reflexive pronoun ends in -self or -selves. It usually refers to another noun or even a pronoun in a sentence.

Examples:

The cat is biting itself.

Do you walk home by yourself?

## ***Intensive Pronouns***

An intensive pronoun is similar to a reflexive pronoun in that it refers back to a noun or pronoun in a sentence. However, this pronoun refers back to it to emphasize it.

Examples:

David delivered the files himself.

The turtle itself tackled the ball.

## **Verbs**

Verbs are words that are actions and states of an object or person.

## ***Physical Actions***

These are verbs that express what someone or something is doing with their body.

Example:

To drive, to order

## ***Mental Actions***

These are verbs that express what someone or something is doing with their mind.

Example:

To ponder, to decide

## ***States***

These are verbs that express what state someone or something is.

Example:

To exist, to be

## ***Action Verbs***

This verb expresses an activity that a person or thing does.

Examples:

John runs to the front door.

Doodle eats her food.

## ***Stative Verbs***



This verb expresses a state of being, thought, or emotion.

Examples:

I am at work.

She feels excited.

## ***Transitive Verbs***

This verb expresses an action on something.

Examples:

Deryl witnessed a cat jump.

The wolf ate the hot dog.

## ***Intransitive Verbs***

This verb does not express an action on something or someone.

Examples:

The dog barked.

His leg hurts.

## ***Auxiliary Verbs***

This verb assists a main verb by applying tense, voice, or mood to it.

Examples:

Sarah has drunk all the coffee.

Stuart has been to Paris before.

## ***Modal Verbs***

This verb expresses ability, possibility, permission, and obligation.

Examples:

Jayden may go for a run.

Randy can drive to the office.

## ***Phrasal Verbs***

This verb combines a main verb and a second word that has a different meaning from its main verb.

Examples:

Criminals usually try to break out of confinement.

The runner in the lead will drop out of the race due to shortness of breath.

## **Adjectives**

Adjectives are words that are used to describe nouns and pronouns.

### ***Attributive Adjectives***

This is an adjective that comes before a noun and pronoun it describes.

Examples:

The hard gray eyes of my grandfather have me scared.

The dark, snowy husky was the last to go to the backyard.

### ***Predicative Adjectives***

This is an adjective that comes after a noun and pronoun it describes.

Examples:

My grandfather's eyes were hard and gray.

The husky's fur was dark and snowy.

## ***Postpositive Adjectives***

This is an adjective that comes immediately after a noun and pronoun it describes.

Examples:

Something horrible is going on outside.

Nothing useful came from mold.

## **Adverbs**

An adverb is a word that can define or alter an adjective, verb, another adverb, or a sentence. Adverbs express manner, degree, place, time, purpose, and frequency. While certain adverbs break from this pattern, we typically make them by adding -ly to adjectives.

Adverbs give sentences more significance by indicating the how, when, where, and degree of an event. They change sentences, verbs, adjectives, and other adverbs.

Examples:

Verbs with modifications: Kim swayed quickly.

Adjective modification: Matt is exceptionally smart.

I only recently started learning volleyball.

These adverbs, which are typically separated by commas, alter entire sentences to convey a point of view or assessment.

Examples:

Luckily, the police arrived on time to assist with the accident.

Unfortunately, Barbara is unable to make it to your graduation.

## ***Adverbs of Manner***

An adverb of manner follows the primary verb and specifies how an action is executed. The adverb should come before the verb or at the conclusion of the phrase if the verb has a direct object; it should not come in between the verb and its object.

Examples:

Martha talked quietly.

Candace screamed loudly.

Mark moved quickly.

## ***Adverbs of Degree***

Degree adverbs alter verbs, adjectives, or adverbs to convey intensity or extent.

Examples:

Exercising provided a very positive effect on losing weight.

I'm almost finished with the exam.

## ***Adverbs of Frequency***

Frequency adverbs can be either guaranteed or unspecified. It indicates how frequently something occurs.

Indefinite Frequency adverbs provide an approximate sense of frequency but not a specific time.

Examples:

On Sundays, Marie always cleans her automobile.

Hazel's room is never tidy.

Definite Frequency adverbs are usually employed to end sentences because they specify the exact frequency of an event.

Examples:

Every week, I tidy my home.

Every day, I go see my family

## ***Adverbs of Time***

Adverbs of time indicate an action's timing and are typically used at the end of a phrase.

Examples:

I will see you tomorrow.

Jordan will be early for the meeting today.

## ***Adverbs of Place***

Adverbs of place usually come after the primary verb and tell us where an action is taking place. Certain words can function as prepositions as well as locational adverbs. When an object is present, they become prepositions as opposed to adverbs.

Examples:

She took the dog outside.

Come in!

## ***Adverbs of Purpose***

Adverbs of purpose provide an explanation for a situation's events. They frequently take the shape of adverbial phrases or act as conjunctive adverbs.

Example:

I started jogging so that I wouldn't be late.

## **Prepositions**

A preposition is the relationship between nouns, pronouns, or phrases and other sentence components.

### ***Prepositions of Time***

The timing of an event is indicated by the use of prepositions of time.

Examples:

The family gathering will be on Tuesday.

Can you drop by our house after 5:30 pm?

### ***Prepositions of Place***

Place prepositions describe an object's location or position.

Examples:

The squirrel ran behind the tree.

Angelo was standing in front of the police station.

### ***Prepositions of Direction***

The direction in which something moves is indicated by these prepositions.

Examples:

Alexa lives across the pink house.

Alice passed the basket to Mia.

## ***Prepositions of Location***

Prepositions of location indicate an object's precise location.

Examples:

Anglica will be at his friend's house for the weekend.

The dog played on the floor.

## ***Prepositions of Spatial Relationship***

An object's movement with respect to a source is indicated by spatial relationship prepositions.

Examples:

Lakshmi hid beneath the cabinet.

I spent the morning running around the neighborhood.

## ***Prepositional Phrase***

A prepositional phrase is one that combines a noun with a preposition.

Examples:

The dress you wanted to buy is out of stock.

Why don't we try working out inside for a change since it's raining.

## ***Prepositions of Manner***

Prepositions of manner indicate the form or way in which an action is performed, often providing insight into the process used to achieve a goal.

Example:

Kim quickly exited the training (Kim left the class quickly).

## ***Prepositions of Method***

Prepositions of method indicate the method by which something is done.

Examples:

John spoke as if he was the leader of the group (In the manner of a leader).

Karan acted like there was no other alternative (In a manner suggesting no other options).

I have worked as a scriptwriter and cinematographer (In the role of a scriptwriter and cinematographer).

## **Conjunctions**

A conjunction joins two words, phrases, or clauses together. When referring to conjunctions in English, common examples are "and" "because" and "when."

### ***Subordinate Conjunctions***

Subordinating conjunctions that introduce dependent clauses include "because" and "although." Dependent clauses have a subject and a verb but are not equipped to operate as standalone sentences. They need to be connected to an independent clause because they do not convey a complete thought. The relationship between independent and dependent clauses becomes apparent by the subordinating conjunction.

Subordinating conjunctions can be used to begin sentences if an independent clause comes after the dependent clause.



Example:

Until the team decides on adequate solutions, the meeting will continue.

When a dependent clause is isolated, it is regarded as a sentence fragment.

Example:

How long will the meeting continue? Until the team decides adequate solutions.

## ***Coordinating Conjunctions***

Coordinating conjunctions join grammatically equivalent parts of speech, like independent sentences, phrases, and words. Coordinating conjunctions can be used to combine adjectives, verbs, nouns, or other word classes.

Examples:

Marco doesn't like to dance or sing.

The results were collected through surveys and polls.

## ***Correlative Conjunctions***

Correlative conjunctions unite grammatically equal items in a sentence and are always used in pairs.

Example:

Eric is not only loving, but also very caring.

These conjunctions entail a concurrent arrangement, allowing for the identical grammatical form for both components.

Example:

Marissa planned to select the perfect candidate for this job by either conducting a second interview or consulting with the hiring managers.

## **Interjections**

Interjections are stylistic additions that express sudden emotions or surprises. They often include an implied pause and are more common in informal writing and dialogue.

### ***Primary Interjections***

Primary interjections are phrases used only as interjections without different meanings. They cannot function as nouns, verbs, or adjectives. These interjections are often simple sounds with no clear etymology and may have various spellings.

Example:

"Uh! That's crazy."

### ***Secondary Interjections***

Secondary interjections are words that typically serve as other parts of speech but can also be used as interjections.

Example:

"Awesome! You did wonderful on the exam."

### ***Volitive Interjections***

Volitive interjections are imperatives that demand or request something.

Examples:

"Shh! We can't hear the movie."

"Psst. Bring me that water bottle."

## ***Emotive Interjections***

This interjection is used to highlight and demonstrate feelings or responses.

Examples:

"Ew. That was disgusting."

"Yay! I'm eager to try this cake."

## ***Cognitive Interjections***

Cognitive interjections transmit ideas or indicate a thought process.

Examples:

"Wow! This was shocking."

"Can you, uh, say that again?"

## ***Prefixes***

Adjuncts are attached at the beginning of root words to alter their meaning.

Common prefixes include a-, be-, dis-, ex-, in-, mis-, non-, uni-, and with-.

Examples of prefixes in words:

bi- (biweekly)

dis- (discharge)

semi- (semifinalist)

## ***Suffixes***

A character or collection of letters inputted to the end of a word to generate a new word.

Examples of suffixes in words:

-able (comfortable)

-er (harvester)

-ful (helpful)

## ***Inflectional Suffixes***

Inflectional suffixes change the form of a word without changing its class or meaning, thus not creating new words.

Example:

"Smile" becomes "smiled" with the suffix -ed.

## ***Derivational Suffixes***

Derivational suffixes create new words from the root word by changing its meaning entirely.

Examples:

"Govern" becomes "government" with the suffix -ment.

Writers can communicate more effectively and clearly in academic, professional, or informal settings by becoming proficient with certain grammatical components.

It is necessary to comprehend the fundamentals of grammar to communicate effectively. Every component is essential to sentence structure and accurate meaning delivery.

## Voice and Tone

Voice is an element of a writing style where the reader can “hear” and understand what the author is saying. A voice portrays an author’s emotions and views. Tone is commonly known for a writer’s attitude.

### ***Active vs Passive voice***

Active voice is where the subject of the sentence is the actor. The main verb describes what the actor is doing. The purpose is to communicate an action.

Examples:

I wrote the notes.

She dances on the floor.

Passive voice presents the subject first, then is followed by the action.

Examples:

The notes were written.

The gun was shot.

Passive voice sentences are written with verbs to signify “to be” (is, was, were, had been, etc.).

A common perception is that personal pronouns can compromise the writer's objectivity or divert attention from the important information. One reason is that passive voices come up more often in technical writing.

## ***Personal vs Impersonal Voice***

Technical communication focuses on relaying information and data, so it avoids personal pronouns. This is due to different situations requiring different approaches.

It is said that 3rd person is preferred in lab reports, lab memos, technical reports, and progress reports. 1st and 2nd person are preferred in emails or writing on websites

To avoid speaking in the first person while maintaining an active voice, nouns such as “The team” or “the group” are used.

Example:

The group wrote the report rather than “We wrote”

Nominalization turns a verb into a noun in which describes an action as a thing

Examples:

Past tense verb: Analyze

Noun: Analysis

Avoid using nominalization though it is grammatically correct. It strays away from the action. With a passive voice, using many nominalizations makes sentences harder to read and understand.

## ***Tone (formal/ informal)***

It is best advised to avoid emotional or qualitative language in technical documentation. The main purpose is to present verifiable information. It is also best to minimize casual language. Informal can be used to show personality, and for casual conversational language. Formal is for a professional setting and to establish respect.

Example:

Came up with, hard (use for difficult), figured out, got it

## **Mood**

Mood reflects a verb to express a specific attitude or the intention of a speaker. Verb moods are used to express ideas such as doubt, hesitancy, and probability. There are 5 moods: indicative, interrogative, imperative, subjunctive, and conditional.

### ***Indicative mood***

This type of mood is used to state facts or opinions disguised as facts. All of the tenses use indicative mood. In relation, the majority of sentences use indicative mood.

Examples:

The sky is blue.

I will graduate next year.

The assignment was due yesterday.

### ***Interrogative mood***

This type of mood is used to inquire questions. So interrogative sentences end with question marks and will have an auxiliary verb in combination with a main verb.

Examples:

Can you read the report?

How much does this cost?

What does the dog eat?

## ***Imperative mood***

This type of mood is used to convey a command, directions, request, etc. The sentence structure involves the base form of a verb without a stated subject. Imperative sentences incorporate exclamation marks at the end to express more emotion and importance.

Examples:

Get back to work!

Walk 3 blocks down and then turn left.

## ***Subjunctive mood***

The subjunctive mood is used to express hypothetical situations, wishes, doubts, and demands. The sentence structure uses particular verb conjugation rules depending on the subject and verb. When there is a first or third-person singular subject, the verb word with s is dropped.

Examples:

He offered to sing in the group. (instead of sings)

We suggested for him to work on the report.

## ***Conditional Mood***

The conditional mood is used to express ideas based on conditions. The sentence will involve verbs like would, could, and should together with the words if/when.

Example:



If I was done, I would have told you

## **Tense**

Tense is used to signify when something has occurred in a past, present, or future tense.

Example of past:

I wrote the notes (sent x time ago)

Example of present:

I am writing the notes (working on the notes)

Example of future:

I will write the notes (still working on them and will send them soon)

These types of distinctions are important as these tenses can provide different meanings. There are 12 forms of tenses. Four each for past, present, and future.

### ***Past tense***

Reports activities that have happened already.

### ***Past Simple***

Indicates an action that has been completed. Verb + ed

Example:

I wrote a report.

### ***Past Perfect***

An action occurred before a certain time in the past (had + past participle)

Example:

By 2022, Klay Thompson had won 4 championships.

## ***Past Progressive***

There are two types of past actions (am/is/are + verb+ing)

Example:

I was writing the report when the meeting occurred.

## ***Past Perfect Progressive***

A past action went on until another event occurred (had + been + verb + ing)

Example:

I had been studying for four years before I graduated

## ***Present tense***

Present tense expresses events that occur now. It also has communications that are still ongoing.

## ***Present Simple***

Suggests that it is happening now. Verb, verb+s (for, he,she,it).

Example:

I still experience withdrawals.

## ***Present Perfect***

An action is occurring when expressed or occurs regularly (have/has + past Participle)

Example:

I have worked on this since Monday.

## ***Present Progressive***

Something is happening when it is expressed (am/is/are + verbing)

Example:

I am working on the report.

## ***Present Perfect Progressive***

Present tense expresses events that occur now. It also has communications that are still ongoing. An action is continuing from the past into the present and maybe into the future (have/has\_+ been + verb\_+ \_ing).

Example:

I've been working on the report for an hour.

## ***Future Tense***

Future tense indicates actions that will happen later.

### ***Future simple***

Implies an action will likely happen (will + verb)

Example:

I will do the work tomorrow.

### ***Future perfect***

An action will be done by a certain time (will + have + past participle)

Example:

I will complete the work by Saturday.

### ***Future Progressive***

An event will continue in the future (will + be\_+ verb\_+ \_ing)

Example:

I will be interning over the summer.

### ***Future Perfect Progressive***

An action will continue until a future time (will+have+been+verb+ing).

Example:

I will have been working out for 3 months.

## ***Usage Strategies***

Technical documentation is not easy so it is said that the best way to improve your writing skills is to practice more. There are strategies and tips to utilize to better you're writing in technical documentation.

### ***Conciseness***

Staying concise makes your writing easier to read and to understand. On the contrary, readers do not want to read long, complicated sentences.

Examples:

In both reports, they showed that Ford had better sales.

Both reports highlighted Ford's sales.

### ***Word Choice***

It is important to establish your audience and understand what they know. If they are not familiar with your vocabulary, the terms will have to be simpler or defined.

Examples:

This item is for your gear.

This item is the best in slot.

Word choice should be consistent throughout to avoid confusion.

### ***Cliché***

Clichés are overused sayings. They should be avoided in formal and academic writing.

Examples:

At the end of the day.

Bring to the table.

## **Structure**

Structure is the organization of words to help convey whatever message you are trying to express. In technical writing, structure is crucial in making sure your sentence is crafted in a way your audience can understand whatever it is you are trying to say. You would usually utilize smaller structures, such as verbs, subjects, and pronouns, to create one whole structure, which would be your sentence.

### ***Sentence Structure***

When it comes to organizing a sentence for technical writing, making sure your audience can understand your document or message is important. A writer can interchange words, but they must all be arranged in a specific way. A complete sentence structure must have a subject followed by a predicate.

### ***Subject-Predicate Structure***

A sentence broken down is a subject and a predicate. The subject being whatever the topic of your sentence is and the predicate being whatever the topic is doing. This is essentially just a noun and a verb.

Example:

Arthur fishes. Marik swims.

In technical writing, a full complete sentence is composed of different phrases and writing tools that work to modify and enhance the subject and predicate respectively. The sentence structure still possesses the same framework as the subject-predicate.

Example:

Susan, current Project Manager, requests an official invoice before they commence work.

## ***Objects***

An object is whatever the recipient of the action in the composed sentence is. These are not necessary in a sentence, but they can be used as accessory elements in a sentence. Now objects have two different classifications: direct and indirect.

A direct object is the direct recipient of whatever the action is in the sentence.

Examples:

Kent forwarded the email.

Steve processed the paychecks.

Indirect Object is the indirect recipient of whatever action is in the sentence.

Example:

Karen handed Steve the keys to the company car

When writing professional documents, manipulating objects to explain their functions, and appearance is how you can better ensure your audience understands.

## ***Complements***

Complements can be used to describe your subject. You utilize these to help explain whatever your subject is. In the following example, Kent is the subject of the sentence and being a “CFO” is the complement used to describe him.

Example:

Kent is a CFO.

Here, Steven is the subject, and “scared” would be the complement being applied to the subject.

Example:

Steven looked scared.

In this example, “project” is the direct object in this sentence. Finally, the complement used to describe this object is a “success”.

Example:

Tabitha sees the project as a success.

## Phrases

A phrase is a short group of words that cannot stand alone as a sentence because it cannot possess a verb. Phrases are useful for modifying different elements in a sentence. A phrase can be multiple words, or just 1 word, with the only requirements being it cannot be its own sentence and it cannot possess a verb. Ensure that whatever phrases you add, it keeps your writing concise, and precise.

Examples:



Charlie is an above average applicant.

She is exceptional at organizing zoom meetings.

There are 8 types of phrases: nouns, adverbial, adjective, prepositional, interjectional, participle, dangling, and conjunctive.

## ***Noun Phrases***

A noun phrase is a group of words that typically has a noun for a headword. Some form of determiner (this, that, the, a, to, for, etc.) that signals the noun.

Examples:

The job offer is ready. (subject)

We are ready to launch the program. (objects)

We will use Outlook 2024 Edition. (complements)

## ***Adjective Phrases***

An adjective phrase is a group of words that acts to modify a given noun.

Examples:

Kent is a very skilled CFO

Steve prefers spicy foods

## ***Adverbial Phrases***

An adverbial phrase is a group of words that modify a verb.

Examples:

Marik finished his project quickly as can be.

The CEO is capable of working very slowly.

## ***Prepositional Phrases***

A prepositional phrase is a group of words that serve as a bridge to connect a noun to the sentence.

Examples:

The company representative is on the way to the yearly meeting.

By saving diligently, she was able to purchase her plane tickets.

## ***Conjunctive Phrases***

A conjunctive phrase does a similar job of a conjunction to join 2 parts of a sentence.

Examples:

Steve submitted the paper early in order to get it over with

We will submit it as soon as we finish the final revisions.

## ***Interjectional Phrase***

An interjectional phrase entails a group of words that essentially interject into the sentence. A dramatic phrase would be an adequate description.

Examples:

How unfortunate. We failed to land the contract.

Congratulations! You succeeded in your yearly milestone!

## ***Participial Phrase***

A participial phrase is a verb phrase that contains a modifier and a participle, and they usually work to change the noun in some way.

Examples:

Kent had her work from home today.

Programmers that are intrigued in the bootcamp can apply online.

## ***Dangling Participle Phrases***

A dangling participle phrase, also called a dangling modifier, is a set of words that are used to open or close sentences. A dangling modifier is not a complete sentence. It lacks a subject to be considered a sentence, but it can modify the subject of whatever sentence it is being used on.

Example:

Closing his laptop, Kent is finished for the day.

Ensure when utilizing dangling participle phrases, the phrase modifies the subject of the sentence. If it does not modify a subject, it is incorrect and will be wrong syntax.

Example:

While attempting to wake up, the laptop was opened.

## **Clauses**

A clause is a set of words that contain both a subject and a predicate. It can be just two words if the verb is apparent; the subject can be implied. They can be utilized to help better shape and write your sentences to ensure concise and clean writing.

Example:

The Manager retires. The employee works. Kevin sits.

Just like phrases, there are different types of clauses, five to be exact: independent, relative, absolute, and elliptical.

### ***Independent Clauses***

An independent clause works like a complete sentence.

Examples:

Kent finished the assignment.

The business forwarded it.

Two independent clauses can be joined by a coordinator (and, but, so, for, or, etc.)

Example:

Tyler finished the quarterly reports, but David revised it.

### ***Dependent Clause***

A dependent clause cannot stand on its own; it joins an independent clause to help change the sentence. Another name for it is “subordinate clause”.

Example:

When we try our hardest, we will achieve our goals.

## ***Relative Clauses***

A relative clause is something that modifies a noun phrase. It uses adjectival phrases and a complete subject-predicate idea to change the noun in it.

Example:

The manager who quit last year asked me for a referral.

## ***Absolute Clause***

An absolute clause is also an adverbial clause that possesses its own subject as well as either has a participle verb or does not have a verb.

Examples:

Alana grieved, her tears sliding down her cheek.

Jordan awoke, basked in the rays of the sun.

## ***Elliptical Clause***

An elliptical clause implies a subject utilizing an adverbial modifier that both implies a subject and modifies the verb.

Example:

While finishing the spreadsheet, Frank ate his lunch.

## **Paragraph Structures**

Paragraph Structures are writing tools utilized to help better organize writing. The sentences written are usually grouped with other sentences in order to group similar and related information to help keep the reading easy to follow. The way a writer organizes their paragraphs heavily depends on whatever the topic of said paragraph is and what relevant information is presented in the paragraphs.

### ***Topic Sentences***

Usually, Topic sentences create the main idea of your paragraph. It is typically located at the beginning and helps guide the flow of the paragraph. A good topic sentence may serve as the reader's first look into your topic. When the readers first read about your topic, they should ideally draw the reader into reading the rest.

### ***General-to-Specific***

Following the Topic Sentence, start explaining more information on the topic. This style of paragraph structure is typically used for guides and is the most commonly used style. Each sentence provides more information on the topic, allowing the reader the ability to skim the document for key points.

Specific-to-General starts off with smaller details pertaining to the topic and it gradually starts getting broader. This style of structuring is more common with persuasive styles of writing.

### ***Question-and-Answer***

This style of paragraph structure is a bit more informal. It involves asking the reader a question and then answering that question within the text. This leads to stronger engagement as the reader feels like they are being personally asked.

## ***Conclusion Sentences***

Conclusion sentences are the ends of a paragraph, they carry a sense of finality to help signal to the reader that the topic is being explored. It does this by summarizing what the paragraph before explained.

## **Rhetorical Structures and Tools**

Tools and writing techniques that an author may use to help convey their knowledge, or opinion, depending on the style of writing being used. These tools include using definitions and descriptions to better educate the audience and compare if your goal is persuasion.

### ***Definition, Description, and Narration***

Definitions help define new terminology to the reader. They are very important to technical writing since being able to define your subject matter is crucial. Descriptions help to paint whatever picture you imagine as you write it. This can include shape, color, smell, etc. Narration serves to tell a story to the audience, usually reserved for fiction or non-fiction work.

### ***Comparison, Contrast & Analysis***

Comparison looks at the similarities between two different subjects. Commonly used words to compare are, like, similar to, similarly, etc.

Contrast serves to highlight the differences between subject matter. It aims to show the audience the key differences between the two, typically using words such as, unlike, different from, etc.

Analogy serves to juxtapose two or more subjects, and it uses one subject to help explain the other subject, similar to comparison but more specific.

## ***Enumeration and Classification***

Enumeration is a way to organize a paragraph in a chronological order. Phrases or words like to begin with, finally, secondly, etc. This helps to keep your writing more organized and easier to follow.

Classification is organizing concepts into their similarities. For example, comparison is a rhetorical writing tool.

## ***Cause and Effect***

Cause and effect are used to show in a chronological fashion, how one object is affected or compromised somehow by the other object. Cause and effect are the processes of things, explaining how we get from point A to point B.

For effective communication, grammatical proficiency is essential for both UCF professors and staff. This involves being conscious of the conjunctions, adjectives, verbs, and nouns used in speech. Grammar standards help eliminate ambiguity, increase readability, and encourage successful audience involvement by ensuring accurate message conveyance. Sentence form is essential for concepts to be presented clearly. To construct cohesive tales, it entails utilizing a variety of clauses and sentence forms. Proficiency in syntax and sentence construction improves the impact and clarity of communication.



# Punctuation

Punctuation is a key aspect of language and is especially important in text. Punctuation's main purpose is to separate sentences and create meaning. One way it does this is by providing an end point to one statement, and after its placement, shows where a new statement starts. By separating sentences, punctuation also can exemplify meaning. For example: periods, exclamation points, and question marks have different uses at the end of a sentence.

Additionally, there are other forms of punctuation that are used within a sentence to better clarify the sentence's message. Commas, parenthesis, semicolons, and many other punctuations can help clarify sentences and avoid ambiguity. Proper punctuation is crucial in the technical writing field. Misusing a comma or putting a period in the wrong place could create many problems in any workplace. What may seem simple can easily be messed up, which has the possibility to cause dangerous misinterpretations that can have dramatic effects on a company. Punctuation should not be taken lightly. In this chapter, each type of punctuation will be explained in detail to prevent mistakes from happening.

## ***Periods***

The general use for a period is to provide an ending to a statement. Its goal is to break up statements with a pause longer than that of a comma, and to convey the transition from one thought to another. It is also important to know that it is meant to be used at the end of a complete sentence/statement.

Example:

“I need to.”

It is not a complete statement so using a period at the end of it would be incorrect.

However, certain cases like, “Move over.” would be a correct use as it can be considered a command which is a complete thought. It can also be used for initials of someone's name such as “J.K. Rowling” or for an abbreviation like “etc.”.

It is also important to know when to use a period. As stated above a period is mainly used in sentences as a statement or command. The period is regarded as neutral punctuation; if spoken out loud, there would be little emotion in the statement. Periods are the most common punctuation used in English grammar because of their ability to deliver a message without imposing any urgency or emotion. When using a period, the statement, “I saw John today.” becomes neutral. This differs from “I saw John today!” in which the exclamation implies that we are excited to see John.

This is especially important in the technical field, since using a period incorrectly, or omitting one, can create errors and misunderstandings. A period should be the most common ending punctuation in technical writing because the goal of a technical document is to explain a complicated process or task in a clear way. Generally, since the goal of a technical document is to explicate, exclamation points are not needed, and question marks will only be used based on a document's certain circumstances. As we've already discussed, a clear explanation will be best described through statements with a neutral tone to ensure a clear message. To create effective directions, reports, manuals, guides, procedures, or any technical document periods do the best job of creating a concise break up of statements and commands. Thus, in the technical field periods are key to creating clear documents void of emotion that are easy for users, employees, managers, and other departments to read and understand.

## ***Commas***

The comma is crucial in technical writing. It is helpful within a sentence to create short pauses to separate words, clauses, or phrases. An important use of the common is its use in lists. With “three or more words, phrases, or clauses written in a series” (Brandeis n.d.) a comma should be used to break up the list.

Example:

“This next project should include linked lists, stacks, and user input.”

The comma is needed to indicate that each item in the list is separate from one another. Commas are also needed to separate an introductory word, clause, or phrase before a main clause. Additionally, commas can be used to separate words, clauses, or phrase's lesser details.

Example:

“John, an entry level programmer, moved jobs to google.”

There are also some common words that a comma should be used with to separate them from an independent clause. These words are and, but, so, for, or, nor, and yet.

Example:

“I want to submit the project, but John hasn't finished the proposal yet.”

With these ideas in mind a common error with commas is to use them to separate an essential part of a sentence.

Example:

“Analyze the data, log.”

It is incorrect and needs to omit the comma. Its placement could also cause confusion making it seem as if analyzing the data and the log are two separate tasks. Another way commas are typically misused is through comma splicing. This occurs when a comma is placed in between two independent clauses.

Example:

“John finished his work for the day, He gets to go home early.”

Is incorrect and thus a comma should not be included in the sentence's current state. A period, semicolon, or changing the sentence would correct this error.

The comma is an important aspect in technical writing, that when used correctly, has many benefits to the technical field. A technical document must be concise and clear so that experienced employees, unassuming users, and different departments can comprehend its contents effectively (Whatfix 2021). Accurate comma use helps ensure that this happens. Separating a sentence correctly lowers the chances of miscommunication and keeps the simple and clear pattern that technical documents require.

## ***Exclamation Points***

An exclamation point can be an important piece of punctuation if you are trying to express emotion. The main use of an exclamation point is to display emotion larger than that of a period's neutral tone. Typically, these emotions are anger, happiness, or surprise which come at the end of an exclamatory sentence (Grammarly 2016). By using an exclamation point the goal of the sentence should be exclaiming an emotion. For example, "Our server is experiencing a ddos attack!" is exclaiming that this is a surprise and is wanting to be seen with a more powerful tone.

Generally, in the technical space exclamation points are seen as unprofessional and should be avoided. For example, saying "The server better be up by Friday!" comes off as angry and not needed. Instead saying "It is paramount that our servers are working for Friday's launch." gets the same point across without adding in the unneeded tone. In the technical space a neutral and serious tone void of emotion should be used. Exclamation points are mainly used outside the business/technical space.

Frequently, exclamation points are overused which can cause problems. Overusing exclamation points makes them less powerful (Grammarly 2016). When used too much they tend to not have the intended effect on readers as they generally start to ignore them. Which is a major issue as exclamations are meant to be seen as impactful and a strong tone. When read like a period, an exclamatory sentence's meaning can be lost. Thus, it's best to use them sparingly to ensure meaning is not lost when they are used. As discussed earlier in the technical field exclamation points should be avoided.

Emotion can cause confusion and can mean many different things. This is obviously a problem as any technical document should be as concise as possible, so it's best to omit exclamatory sentences. Additionally, the message of an exclamatory sentence can still be received without its use as statements can be reworded and better described (Whatfix 2021).

## ***Question Marks***

Often in writing there comes a time when a question arises. Thus, the question mark is the perfect punctuation tool to display any question. Mainly, a question mark is used when a direct question is asked. For example, “Can you run this code to make sure it compiles?” is a direct question. An indirect question, however, should not use a question mark as its punctuation. Something like “I wonder if the server will fail?” is an indirect question, so instead it should end with a period (Grammarbook n.d.). Rhetorical questions should also use a period rather than a question mark as they are meant to be unanswered. Another case, when a half statement half question occurs a question mark can be used. For example, “You want the project done, don’t you?” is still considered a question (Grammarbook n.d.).

Technical writing can include questions (Akinci 2011). It would be impossible to improve documents and finish work without them. So, like the period, question marks are expected to be seen in any technical document. However, the general rule with the question mark should be if it's really needed. Many documents like user guides or manuals will most likely not ask questions as the goal is to explain information. It really comes down to each case to determine if it should be used. It is expected in technical documents but should be considered carefully in its addition to a document.

## ***Parentheses/Brackets***

Parentheses and Brackets are a popular way to insert extra details and clarify information. Typically, they are misused as well as overused causing confusion. The purpose of parentheses is to put extra information inside it. The information is less important than that of information in between dashes or commas. Usually this information includes definitions, shortened forms, cross references, citations, extra detail,

and clarification (Australian Government Style Manual 2021). For example, “A linked list (a data structure used in computer science) has many uses in coding.” adds a definition inside the parentheses. When using parentheses and brackets it is also important to remember to place punctuation outside brackets and parentheses unless the entire sentence is parenthetical. Normal punctuation rules should be used.

Generally, brackets are used to insert comments into someone you are quoting or to insert material into something in parentheses (Australian Government Style Manual 2021). When quoting someone brackets are often used to clarify what is being said as well as paraphrasing what is being said. Another thing to note is to omit parentheses inside of parentheses, brackets should be used instead if there must be an additional need for them.

In technical writing brackets and parentheses are extremely important. Not only do they help improve meaning and condense extra information, but they also have many uses. Don’t overuse them however, as this will contradict their purpose by over-complicating sentences and making documents difficult to understand. If used sparingly, technical documents will greatly benefit with their addition by simplifying parts of documents and allowing readers to better understand what the technical document is trying to explain.

## ***Semicolons***

Semicolons are often misused and misunderstood in English Grammar. When used correctly, semicolons can be versatile punctuation marks which help writers create more complex sentences. Similar to commas, semicolons show that there is an audible pause within a sentence, a bit longer than a comma, but shorter than a period’s full stop.

One instance where a semicolon could be used is when linking together two closely related, independent clauses such as saying, “Call me tomorrow; you can give me an answer then” (GrammarBook n.d.). It’s important to note that semicolons should be avoided if the first clause is dependent – instead a comma should be used.

Another time that semicolons should be used is when dealing with conjunctive adverbs (however, therefore, nevertheless) or transitional phrases (for example, in fact, on the other hand) to link independent clauses. For example, “Bring any two items;

however, sleeping bags and tents are in short supply.” would be the correct way to use semicolons in this instance (GrammarBook n.d.).

The third rule of semicolons is when dealing with complex lists, semicolons should be used to separate units of a series as it helps to avoid confusion and clarify each element.

Examples:

“The conference has people who have come from Moscow, Idaho; Springfield, California; Alamo, Tennessee; and other places as well.”  
(GrammarBook n.d.).

It’s important to note that a semicolon should be used throughout the entire sentence if the last item is still a unit of the series.

The fourth rule of semicolons says that a semicolon can be used between independent clauses that are joined by a connector (and, but, or, nor) only when one or more commas appear in the first clause. For instance, saying, “When I finish here, and I will soon, I’ll be glad to help you; and that’s a promise I’ll keep.” uses a semicolon correctly (GrammarBook n.d.).

By mastering the use of semicolons, writers can create documents with more variation and complex sentences, which helps to add depth and clarity to their writing.

## ***Colons***

Colons are punctuation marks that are used to introduce, emphasize, or elaborate on information. The most common way that colons are used is when introducing a list of information that is closely related to the first clause. An example of this would be saying “There are three types of muscle in the body: cardiac, smooth, and skeletal.” (Grammarly 2023). In this example, the colon signals that the audience is about to learn the names of the three types of muscle that the first part of the sentence mentioned.

A second way that writers can use colons is before a noun or a noun phrase that elaborates on the first clause. Saying something like “The movie had everything I wanted: action and suspense.” would be a correct way to use a colon, as it helps to provide emphasis on exactly what the author liked about the movie (Grammarly 2023). Using colons this way helps to provide more detail about the information mentioned in the first

clause. This also applies to titles and subtitles, as using a colon helps to emphasize the subtitle.

Colons are also used when introducing quotations, especially when the quote is formal, long, or the first clause is a complete sentence. For instance, the sentence “He ended with the immortal words of Neil Young: ‘Rock and Roll can never die.’” uses a colon to prepare the reader for the quotation that follows (Grammarly 2023).

It’s important to note that colons should not separate a noun from its verb, a verb from its object, a preposition from its object, or a subject from its predicate (Grammarly 2023). To give an example, a sentence like “The three types of muscle in the body are: cardiac, smooth, and skeletal.” would be written incorrectly as the colon separates the verb “are” from its subjects. Instead, the writer would not need to include a colon at all in the sentence as the word “are” is used in place.

## ***Hyphens***

A hyphen is a punctuation mark that is used to connect words, mainly for joining two or more words to create a compound term. This helps to ensure that the reader understands that the words are meant to be read together to form a single concept. For instance, the sentence “We’re looking for a dog-friendly hotel.” uses a hyphen to join the words “dog” and “friendly” together to show that they function as a single adjective to describe a hotel (Grammarly 2023).

Hyphens are especially helpful in scenarios where the writer wants to avoid confusion on the reader’s part. Think of words like “recover” and “re-cover” which have the same spelling, but only a hyphen to differentiate them. “Recover” would mean to have something return to its original state while “re-cover” would mean to cover something again. The hyphen changes the meaning of the word entirely, which is important when writing.

## ***Dashes***

A dash is a small horizontal line that floats in the middle of a line of text, similar to a hyphen. The en dash and em dash are the two most common types of dashes that both serve different purposes.



Em dashes are often used to create a stronger break in a sentence, insert information, or create a change in thought. A pair of em dashes can replace commas, colons, or parentheses, depending on the context of the sentence. For parentheses, instead of writing “The second baseman leaped for the ball (or, rather, limped for it).”, a writer could instead use an em dash: “The second baseman leaped for the ball — or, rather, limped for it.” to make the sentence easier to read and understand (Grammarly 2023). For commas, it’s the same rule of replacing each comma with an em dash so it creates separation from the sentence. By using em dashes instead of colons, saying “He’s afraid of two things — spiders and senior prom.” instead of “He’s afraid of two things: spiders and senior prom.” helps to create more emphasis and emotion in the sentence (Grammarly 2023).

En dashes are slightly smaller than em dashes and are used to indicate a time or a range of numbers. The en dash can be interpreted by the reader as meaning either “to” or “through” like the example “The teacher assigned pages 101–181 for tonight” which shows pages 101 through 181 should be read (Grammarly 2023). It can also be used to indicate a connection between two words, especially with a complex compound adjective, where both elements are already hyphenated such as writing about the “pro-choice–anti-abortion argument” (Grammarly 2023).

Both em and en dashes are powerful tools that can be used in writing that help to enhance understanding, add emphasis, and improve the flow of the text.

## ***Quotation Marks***

Quotation marks are a punctuation mark that is used to include quotes, dialogue, titles, or emphasize words in text. The most common use of quotation marks is when an author is quoting a source directly. When using “the same word, sentence, or phrase as another author, put those words in between quotation marks” (Grammarly 2024). This is most commonly used in nonfiction and academic writing and helps to prevent plagiarism and to give credit where credit is due.

Quotation marks should also be used when a writer wants to show dialogue or transcribe speech. This can be used in nonfiction writing, when transcribing what someone said in something like an interview or eyewitness account; or it can be used in

fiction writing, when writing dialogue from a character. For example, “‘Where is the emergency room?’ he asked the nurse urgently.” is a correct use of quotation marks for dialogue (Grammarly 2024).

Another way that quotation marks can be used is when mentioning the titles of short works or differentiating a nickname from a given name. For titles, if it’s long, it should be italicized, but if it’s short, quotation marks should be used like saying “Written by Sylvia Plath, “Tulips” is a sad poem” (Grammarly 2024). Quotation marks can also be used for nicknames like when people say “Dwayne “The Rock” Johnson” to show that it’s not part of their actual name (Grammarly 2024).

The last way that quotation marks can be used is when emphasizing or discussing words. For instance, writing “My “pet” is just a stray cat” helps to show the reader that the writer “doubts the validity of a word” (Grammarly 2024). This term was coined as a “scare quote” and is the origin of when people started using the air quotes gesture in face-to-face communication (Grammarly 2024).

## ***Ellipses***

An ellipsis is a punctuation mark that consists of three dots (...). It is used to indicate omission, hesitation, or unfinished thoughts. One of the primary uses of ellipses is to show that words have been omitted, or removed, usually from quotes to cut out irrelevant parts. For instance, saying, “It must be obvious . . . that there’s a contradiction in wanting to be perfectly secure in a universe whose very nature is momentariness and fluidity.” uses an ellipsis to cut out unnecessary information (Grammarly 2022).

An ellipsis can also be used as a pause for dramatic effects or suspense. The sentence, “With sweaty palms, I reached out for the knob and threw the door open to reveal...a lost puppy.” uses an ellipsis right before the anticipated part in order to build suspense for the reveal (Grammarly 2022).

The last way that ellipses can be used is when a sentence trails off into silence or suggests that there’s more to come. An author could write “Would you like sugar for your coffee, or...” to show that the speaker trailed off before finishing (Grammarly 2022). Or

another way to use the ellipses is saying something like “To be continued...”, where the ellipsis suggests that there is more to come (Grammarly 2022).

## ***Apostrophes***

Apostrophes are a crucial punctuation mark that is primarily used to show possession, contractions, or indicate certain plurals. The most common way that apostrophes are used is when showing possession of a noun. For instance, saying, “the boy’s hat” shows that the hat belongs to the boy (Purdue n.d.).

Another way that apostrophes can be used is for contractions, or the omission of letters. A contraction is a word where one or more letters have been discarded and is used to make writing more concise and helps to reflect natural speech. Some common examples of this include, “don’t” meaning “do not”, “I’m” meaning “I am”, and “could’ve” meaning “could have” (Purdue n.d.).

The last way that apostrophes can be used is when forming plurals of lowercase letters or numbers. Some examples of this are, “minding your p’s and q’s” and, “The ‘60s were a time of great social unrest” (Purdue n.d.). The apostrophes used in these examples help to make the plural forms clear and easy to read.

# Capitalization

This chapter focuses on capitalization. It is a vital component of grammar that, by identifying proper and common nouns and signaling the beginning of new sentences, improves text structure, readability, and professionalism. It entails capitalizing a word's initial letter and adhering to certain guidelines that change depending on the language and writing style.

## ***What is Capitalization?***

An essential part of grammar that makes text organization easier for reading, conveying a message and distinguishing between proper and common nouns is something called capitalization. This is when the first letter of a word is in uppercase followed by lowercase. Although the rules for capitalization will vary between language and writing styles, there is usually a set of norms or rules that help preserve consistency and readability of the text.

Using Capitalization will serve writers with many purposes. It can mark the beginning of a new sentence, distinguish proper nouns, and help indicate items such as titles and headings. Overall, following the rules of capitalization will improve your writing's readability, your readers comprehension, and it will also contribute to the professionalism of your writing.

## ***Basic Rules of Capitalization***

When writing, these are some of the basic rules of capitalization that must be followed in order to have clear and proper writing.

## ***First Word***

The first word of every sentence should always be capitalized.

Example:

This class will create a single style guide.

## ***Proper nouns***

Proper nouns, which are people, places, things should always be capitalized.

Examples:

Maria, Florida, Empire State Building

The letter “I” should always be capitalized when it is by itself in a sentence when referring to one in the first-person. Notice how both “While” and “I” are capitalized in the following example.

Example:

While I do my homework, I put away the laundry.

## ***Titles and Headings***

When it comes to titles, all major words in the sentence have to be capitalized. Minor words like articles or conjunctions like “and, but, or, the, a” should not be capitalized unless specified by the author.

Examples:

The Great Gatsby

Salt to the Sea

## ***Geographical Names and Locations***

Geographical locations like countries, states, and cities should always be capitalized.

Examples:

United States, Florida, Orlando

## ***Positions and Job Titles***

Job titles or positions should always be capitalized if they come before a name but if it comes after, it is not needed.

Example:

President George Washington

Example:

George Washington, the president.

## ***Religions***

The names of religions, terms and texts should always be capitalized.

Examples:

Bible, Christianity, God

## ***Nationalities and Languages***

Languages and nationalities should always be capitalized.

Examples:

American

English

Spanish

## ***Titles, Regardless of Quotation Marks***

The titles of books, articles, songs and movies should be capitalized following the rules of titles, regardless of if they are in quotations or not.

Examples:

“The House of Hades”

“Fatal Trouble”

## ***Historical Events***

Historical events and periods of history should always be capitalized.

Examples:

The Great Depression

World War II

## ***Holidays and Time***

The names of times like days and months along with holidays should always be capitalized.

Examples:

Monday

July

Christmas

## **What Not to Capitalize**

People often capitalize on information that they think is important. Putting excessive capitalization will not only defy many grammar rules, but also confuse readers and divert their attention. However, failing to capitalize some phrases could look unprofessional. You should avoid capitalizing every word since this might cause readers to be intimidated. Adhering to proper rules of capitalization and avoiding the following examples help maintain the proper structure and readability of your writing.

### ***Inconsistent Capitalization***

Consistency in capitalization throughout a document is important for its readability.

Example:

Incorrect: Her favorite pastime is Reading. She greatly enjoys reading.

Correct: Her favorite pastime is reading. She greatly enjoys reading.

### ***Overcapitalization***

Overcapitalization comes into play when people want to capitalize what they think is important in a text.

Example:

Incorrect: spring, summer, fall, winter

Correct: Spring, Summer, Fall, Winter

However, if the season is in a title, it should be capitalized.

Example:



## Summer Olympics

### ***Capitalization of Quotes***

Capitalize the first word of a sentence in a quote, but not quotes within that sentence.

Example:

She told me “The staff told its “By the produce” so I went there”

### ***Generic terms***

Similar to overcapitalization, this should be avoided as it takes away from important things within a text.

Example:

Incorrect: The Company will create a new Product.

Correct: The company will create a new product.

## **Capitalization in Writing Styles**

Writing clearly and professionally requires an understanding of capitalization along with the proper application of the mentioned rules. While there may be differences in needs among writing styles, the fundamentals of capitalization help make your work readable and well-structured.

### ***Capitalization in AP Style***

AP Style is also known as “downstyle”—describes when all words are left lowercase unless it is the first letter of a sentence or a proper noun. It is most used in journalism and public relations for things such as titles and headlines.

Example:

The party did not have a candidate for president.

## ***Chicago Manual of Style***

It has detailed rules for capitalization, mostly for bibliographies and citations which is why this style is often used in book publishing.

Example:

“The primary cheeses used in Chicago-style pizza are mozzarella, Parmesan, and Romano (Bruno 1983, 4).”

## ***MLA and APA Styles***

Mainly used in academic writing, these styles have specific rules for title capitalization when it comes to citations.

Example:

MLA style uses title case for titles of works.

Example:

APA style uses sentence case for titles of articles and chapters.

By adhering to capitalization norms, UCF students and staff can ensure clear, structured, and professional writing.

# Spacing

Something that most people often overlook when it comes to writing is spacing, its rules and how it is used properly. However, Spacing plays an important part when it comes to the readability and consistency of an article, paper, or document. Make sure that the spacing throughout a text is consistent; this ensures that the writing flows properly as well as adding to the overall appearance of a document. Spacing is a broad topic and not only includes the spacing between words. Spacing also takes into account the rules of spaces that follow after punctuation such as periods, commas, colons, or semicolons along with a few exceptions for things like question marks. Spacing also includes the spaces before and after sentences along with paragraph breaks.

## ***Spacing Between Words***

There should only be one space between words when you are writing. Having multiple spaces will cause a lot of extra space that can not only lead to formatting issues but also readability issues.

Examples:

One space: This is a normal sentence.

Multiple spaces: This Sentence    has   multiple    spaces.

## ***Spacing Before Punctuation***

A space should be used before and after a period if it is in a proper noun. This format might cause formatting issues within the document so you should use line breaks to make sure the name stays together. In contrast, a space should not be used before punctuations like commas, periods, and colons. Similarly, a hyphen should be used to join words that form a single idea and in that case a space should not be added since it would break up the words, defeating the purpose of the hyphen.

Example:

He was a well-adjusted student.

## ***Spacing After Punctuation***

In general, there should be a space after punctuations such as periods, commas, colons, semicolons, periods, question marks and many others. Like many rules, this has a few exceptions. The most notable one is for quotation marks.

Example:

The music video comes out today. She was very excited.

Example:

He said “No”

## ***Spacing When Typing***

Although typing rules will vary between people since it comes down to preference, there are a few general guidelines that most writers will follow due to the fact that it improves the overall look of a document and its readability. Some of these include indenting the starts of a paragraph.

Example:

Today, Ella decided...

Another general rule that most authors follow when it comes to spacing is adding breaks between paragraphs that have different ideas. These breaks in text also help the readers with a clear indicator that the author might be moving on to a different topic. Giving these visual breaks will not only improve readability but also give your document a better look.

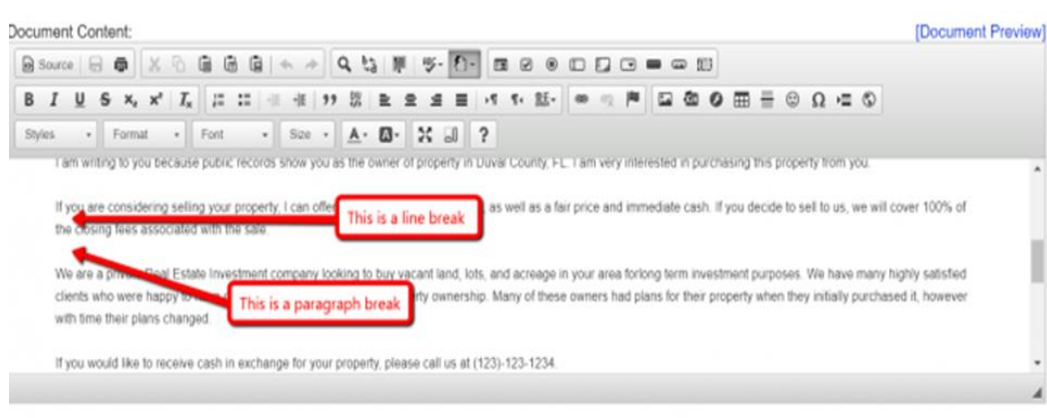


Figure 4.1 Illustration on braking spaces

## ***Spacing Between Lines***

When typing, you have the option to either single or double space your work. This will vary based on a writer's preference, but there are a few writing styles that will require a certain format and this will indicate whether single or double spacing is needed in the document. When writing academic papers, double spacing with 12pt font will generally be used.

### Example of double spacing

This is an example of how a  
sentence with double spacing  
could look.

### Example of single spacing

This is an example of how a  
sentence with double spacing  
could look.

**Figure 4.2** Illustration on Single and Double Spacing

Any written document's appearance and readability depend on proper spacing, which also ensures uniformity and flow. It includes managing gaps before and after sentences and paragraph breaks in addition to the proper spacing between words and punctuation symbols like commas, colons, and periods.

# Essentials of Document Design

## Introduction

This chapter will discuss the importance of document design and highlight the key elements that technical writers use to best suit their readers' needs. When it comes to technical writing, designing the overall layout of the document is an important decision, as you choose how you wish to portray your work to a variety of readers who may not share the same tastes and preferences.

While one reader may be able to read your work without any difficulty, another reader may have a hard time navigating through your writing due to factors such as improper line spacing or hard-to-read font styles. As a result, the reader may not be able to gain a full understanding of the topics that you presented and will instead become uninterested. Thankfully, with proper precautions, this effect can be remedied. The fundamental principles that make up a well-made document are as follows:

- Headings/Subheading
- Alignment
- Whitespace
- Repetition
- Text

Readers see the visual design of these elements before they can read and understand your message (Beck, n.d). When a technical writer takes these principles into account, they understand the reader's attitudes and can adjust their document accordingly to best suit their needs. The reader feels that they can better engage with the content and retain the information that is presented to them. The end result is a much more enjoyable experience (Beck, n.d).

A technical writer may choose to use bold font for their headings to ensure that readers can quickly locate important information. This ensures the reader can quickly

identify key points within your document and makes the document look more appealing. No matter what form of technical documentation you wish to use - such as instructions, emails, proposals, reports, etc., each of these elements plays a key role in how to communicate with the audience.

## **Headings/Subheadings**

### ***What is a Heading/Subheading?***

The first principle of document design is headings/subheadings. Whenever we as humans read information, our eyes will naturally follow two distinct patterns depending on the type of document, these being F-patterns and Z-patterns. If the document is in the form of a report or a proposal where the content is more text-heavy, our eyes will read in the F-pattern, in which the reader will scan down the left-hand side of the page until something of interest is found. Once this information has been found, the reader will then begin to read from left to right to obtain more information (Rea, 2021). If the document is in the form of a website, the eyes will follow the Z-pattern, where they will begin from the top left corner of the page and end at the bottom right in the motion of a z.

Headings help to draw the reader's eyes to certain elements within the text, as well as assist the reader in following the flow of information by assessing which items are the most important and will require immediate attention (Wozencraft, "9.5 Contrast", n.d). With the idea of eye-reading patterns in mind, technical writers can influence how information is presented by appealing to these patterns in a way that would best suit the readers' needs. For example, if a technical writer produces a set of instructions for how to operate a piece of machinery, they could infer that the readers will want to be able to quickly access key points of the article that are important to them. The writer could then use features such as headings to pinpoint important steps, as well as subheadings if the reader wishes to find more related information on the topic.



## ***How to Add Headings/Subheadings***

Word processors such as Microsoft Word or Google Docs have a built-in feature that allows you to create headings/subheadings within your document automatically. Access the built-in heading templates for Microsoft Word and Google Docs with the following steps.

### For Word

1. Go to the Home tab
2. Select Styles
3. In the Styles Gallery, choose the heading style

### For Google Docs

1. Hover your cursor over the “Normal Text” dropdown menu
2. Select the menu and hover over the desired heading style
3. Select “Apply Heading”

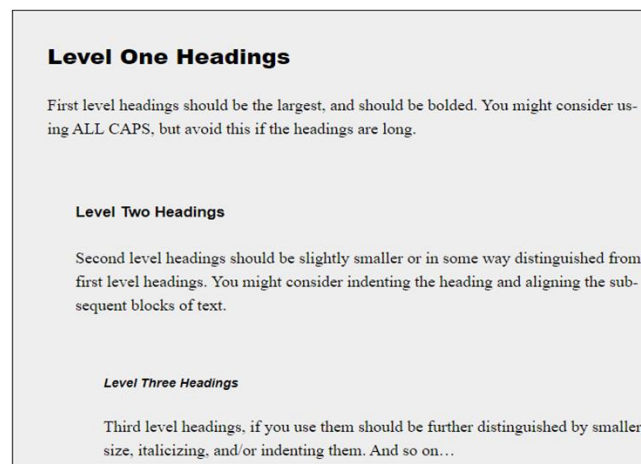
## ***Best Practices of Headings/Subheadings***

When designing headings for a document, there are several conventions that should be followed to best communicate ideas:

Effective headings use concrete, descriptive language to tell the reader what to expect from the content of each section (Neveu, 2019). If a technical writer were to provide a heading for a section covering information on the different designs of a generator, the heading could be written as “Classifications of Generators”. By doing so, they provide the reader with the necessary information needed to determine if this information is relevant to them. Avoid using articles (a, an, the) within the beginning of a heading, such as “the” in “The Importance of Greenhouse Gasses”, as it diminishes the professionalism of the document.

Avoid “windowed” headings, which are when a heading occurs at the bottom of a page and the preceding text begins at the top of the next page (Gross et al., 2017). Readers can lose track of where they are within the document and find it less visually appealing. Start the heading on the next page so that all contents are together to remedy this. Additionally, avoid “stacked headings”, in which there are two consecutive headings without any intervening text (Neveu, 2019). Treat headings similar to book titles, where there must be information below it to progress to the next.

The general principle for headings is that they should follow a hierarchical relationship of ideas, in which the different levels of headings indicate the importance of each section and how they connect, such as in Figure 1.1:



**Figure 5.1** "Example of Level Headings" (Neveu, 2019)

As shown in the above example, the level one heading corresponds to the central idea of the document, such as the title of the document or a chapter of a style guide. The use of bold font and large font size helps to distinguish itself from the level two and level three headings, making it easy for the reader to indicate the importance of this section. This naturally allows the reader’s eyes to follow the previously discussed F-pattern, in which the reader will immediately stop at the heading and begin to read the information contained within it from left to right.

Do not use too many headings; the document can become cluttered and hard to read. Avoid using excessive levels of headings and subheadings, as the reader can become lost due to the document having too many conflicting heading levels. Most technical writers utilize 2-3 level headings:

## **Level 1 Heading:**

Referred to as the main heading, as is used for central ideas such as the title of a document. The use of bold and center alignment helps the reader easily identify its importance to the document.

## **Level 2 Heading:**

Used to represent major topics of an article, such as an introduction to a research article. Left-align the heading for easier readability.

## ***Level 3 Heading:***

Used to represent supporting topics of an article. Italicize the heading for easier readability.

A general guideline is to aim for roughly 2-4 headings and sub-headings per page, as this allows for proper spacing and visual clarity (Neveu, 2019).

Avoid using headings as a means for introducing visual aids such as tables, figures, or lists. These visual aids need a preceding line of text– known as a “lead-in sentence”–to introduce the figure or table and explain the contents of these visual aids (Neveu, 2019). Include the figure in a previously used heading instead and provide the lead-in sentence explaining its contents.

## ***Summary***

Headings are an important feature of professional writing for both readers and technical writers. For readers, headings inform them of upcoming topics. This pattern of organization helps guide a reader's eyes to key points of interest, reducing the time required to scan the document and leaving readers satisfied.

For writers, headings help maintain organization within a document and keep the writer focused on the topic they are presenting. Additionally, they can aid a writer by breaking up long stretches of text. Headings can be used in a variety of mediums. "Even a routine email that covers a topic in so much detail that it could be internally divided without being put into document format would benefit from the usage of headings" (Smith, para. 4, 2021). Headings are a powerful tool when communicating to an audience and are a valuable asset when it comes to technical documentation.

## **Alignment**

### ***What is Alignment?***

Alignment is thought to consist of invisible lines throughout the document that connect different objects, which provides the structure for a page and influences how a reader approaches the information presented. It also influences the order in which information is examined (Pattison, Nicole, 2022). Alignment works alongside headings to present the viewer with information in a manner that is both effective and visually appealing. While headings offer a brief introduction to the topic and inform the reader of what they can expect to learn about, alignment helps to guide the reader through the information by formatting the document in a manner that will allow the human eye to naturally progress without being impeded.

Alignment gives writers complete control over how they want the reader to view the information. For example, if a document is in the form of a report or a set of instructions, writers can influence the reader's eyes by aligning the information to the left of the margin. The reader will then follow the F-pattern, in which the reader will scan down the left-hand side of the page until a key point of interest is found, then proceeding

to read the information from left to right (Rea, 2021). If a document is in the form of an infographic or a website, writers might want their readers to instead start from the top left of the page and navigate the document in a Z-pattern.

Styles of alignment can be classified into four different types: Left, Right, Center, and Justified. Left and Right alignments align the entirety of the selected text along the left or right margins of the document respectively. Left alignment is mainly used for long lines of text and headers, making it easier for the reader to navigate through the page, whereas Right alignment is used for features like visual aids, such as tables or images. Center alignment aligns the text in the center of the document and is mainly used for important elements such as titles of a set of instructions or proposals (Pattison, Nicole, 2022). Justified alignment adds extra space between words so that both edges of the text are aligned with the left and right margins and is mainly used for articles that require multiple columns such as newspapers.

## ***How to Add Alignments/Indentations***

Modern word processors offer built-in alignment settings that can be utilized to quickly arrange information in the manner that a writer wishes to present. Below are the steps to add built-in alignment options to your documents in Microsoft Word and Google Docs:

### For Word

1. Go to the Home tab
2. Select the text that you want to align
3. In the Paragraphs section, hover over the alignment style you need.
4. Select the alignment style to apply

### For Google Docs:

1. Select the text that you want to align
2. Select the Format tool in the Toolbar
3. Hover your cursor over the Align and Indent section

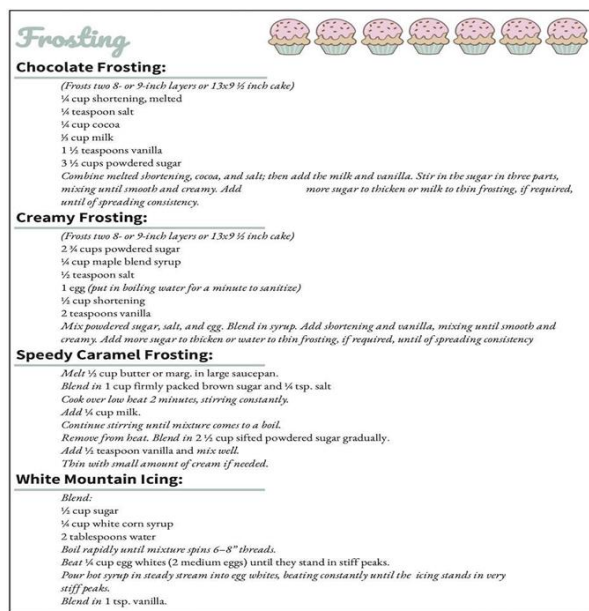
#### 4. Choose the alignment style to apply

In addition, choosing to shift the alignment of the text by using an indentation, will shift the selected text to the right by a fixed number of spaces. This can be done by using the Tab key on the keyboard or using indentation increment/decrement options within the word processor.

### ***Best Practices for Alignment***

When creating a document, there are several practices for proper alignment that should be taken into consideration:

Be sure to maintain consistent alignment options between elements within your document, as this maintains unity within the page (Mack, 2019). Inconsistent alignment can reduce visual clarity and cause the reader to become confused by the differing styles. For lengthy documents such as reports or project proposals, it is best to place the most important information along the left-hand margin, such as headings and subheadings, while placing other items such as the main text further to the right through either indentation or using the TAB key (Pattison, Nicole, 2022). Figure 2 demonstrates this practice:



**Figure 5.2** "Example of Alignment" (Pattison, Nicole, 2022)

By placing the headings of the different frosting types along the left-hand margin, as well as indenting the main text of each heading, the reader can immediately identify key sections of the document and direct their eyes along the supporting text from left to right. As a result, a writer has naturally induced the F-pattern within the reader, which allows them to easily scan the document and find the information they need. A helpful tool to visualize this is by treating the page as an outline. In this case, major topics for a section are often aligned to the left, while the subtopics or supporting evidence underneath are indented to the right (Pattison, Nicole, 2022).

The main text within a document should always have an indent at the beginning of the paragraph. This makes it easier for the reader to differentiate between the end of one paragraph of text and the beginning of the next.

When creating the title of the document, use the center alignment to bring it to the center of the page. This draws the viewer's eyes to the main topic of focus that the writer wishes to communicate to the audience and will be the first thing the reader sees when viewing the page (Felter, 2024). For example, if a technical writer wanted to create a set of instructions for how to assemble an office chair, they would have the title "Office Chair Assembly Guide" centered at the top of the document, allowing readers to immediately understand the topics that might be presented within the instructions.

## ***Summary***

Alignment is a very powerful tool when it comes to communicating your ideas to your audience. Alignment creates a relationship between a document's elements and the page, allowing the reader's eye to be naturally guided from one point to the next (Mack, 2019). With this idea in mind, technical writers can control the flow of information by utilizing different alignment styles to promote the natural eye patterns the readers follow when reading a piece of text.

If a technical writer wants the readers to follow the F-pattern, they may wish to use left alignment for elements such as headings, allowing for the eyes to stop at a key point of interest. This in turn causes the readers to begin to read the document from left to right as they continue to take in the information given by that topic (Rea, 2021). This can be further enhanced by indenting the main text under the heading to the right indicating that it is relevant information to that topic. This makes scanning the document much more efficient for the reader and enhances the visual appeal (Beck, n.d). Alignment offers technical writers various methods of how they can portray their information to their audience in a manner that is both unique and effective.

## **Whitespace**

### ***What is Whitespace?***

Whitespace is the blank space around elements such as text and images that draws the reader's attention to the content itself (Wozencraft, "9.5 Contrast", n.d). Without whitespace, the document would be filled by a long solid wall of text, with no spaces or indentations in between. An example of this can be seen in cases such as classic textbooks. They have very little spacing within each paragraph, and as a result, can appear daunting. A document of this form causes the reader to be overwhelmed by the amount of information presented, making it hard for them to be able to understand the topics that you wish to communicate. Luckily, whitespace helps to alleviate these issues by ensuring that visual clarity is maintained throughout the entire page.

In addition to creating a sense of balance and flow, whitespace also makes a document easier for the reader to digest information. When multiple headings and lines of text are broken up by spaces, it is much more visually appealing to the reader, as contents that contain similar pieces of information are placed into individual sections and are separated from unrelated topics (Pattison, Nicole, 2022). This addition of whitespace—as well as the use of headings and alignment—presents the reader's eyes with a unified document in which each topic is neatly organized and does not overpower one another.



## ***How to Create Whitespace in a Document***

Whitespace can be created in a variety of methods. The first method is by separating paragraphs by one space. This can be done by simply pressing the ENTER key twice on your keyboard after the end of a paragraph, causing a space between the last paragraph and the beginning of your next.

Another method would be to increase the line spacing of your text. Many modern word processors have a built-in option to quickly change the line spacing of your text, making it easier to read. Here are the steps for increasing line spacing for Word and Google Docs:

For Word:

1. Select the text you wish to change
2. Go to the Home tab
3. Select Line and Paragraph Spacing
4. Choose the number of line spaces you want or select Line Spacing
5. Select the line spacing you wish to apply
6. Select OK

For Google Docs:

1. Select the text you wish to change
2. With the text selected, choose the Format tool in the Toolbar
3. Hover over the Line & paragraph spacing option
4. Choose the line spacing you wish to apply

## ***Best Practices for Whitespace***

Avoid using long paragraphs for lengthy documents such as proposals, as these can create giant chunks of text that can be unappealing to the reader (Beck, n.d). This can be remedied by ensuring there is at least one space between each paragraph, which can be

done by hitting the ENTER key twice on your keyboard. A good standard to follow is by creating a new paragraph after every 3-5 sentences, depending on the length. This allows the reader to be able to distinguish one point in a topic from the next and reduces any clutter in a document.

In addition to breaking up large paragraphs, be sure to separate sentences that may be too long of a length, as this can also result in the formation of solid blocks of text within a document (Botha, 2022). When sentences are of varying length, this can reduce the clutter of large text and break up information into smaller, more manageable pieces for the reader.

When creating headings, be sure to leave passive space above and below headings, as this improves the readability of the document (Neveu, 2019). Figure 3 illustrates this point:

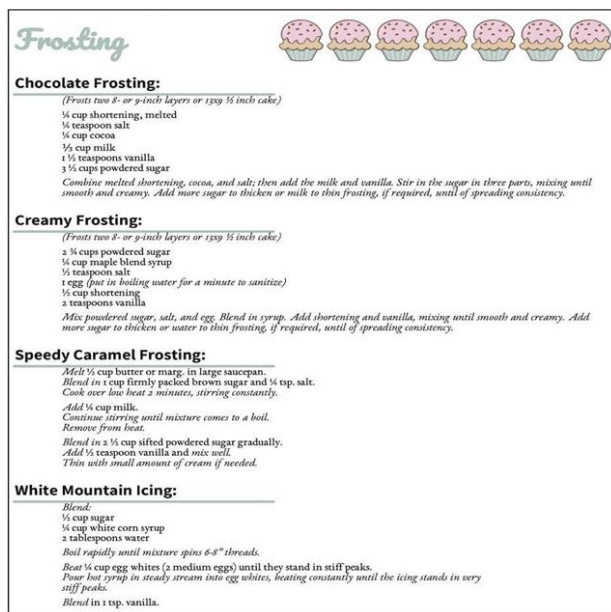


Figure 5.3 "Example of Alignment" (Pattison, Nicole, 2022)

Including a space before and after a heading keeps a topic contained within its own section of the page. This reduces the possibility of confusion due to improper

spacing by eliminating clutter that may cause the reader trouble when viewing the document. This rule also applies to titles of a document, allowing for 1-2 spaces below it to separate itself from the opening text (Smith, 2021).

Avoid using double-space for documents unless it is necessary for your audience, as this results in double the number of pages being printed if converted to a print format. Modern word processors set line spacing to be single-spaced by default which is considered the standard for most documents (Smith, 2021).

## ***Summary***

Whitespace is an important principle when it comes to maintaining balance within a document. The use of negative space eliminates visual clutter by separating key sections of text and draws the reader's attention to each piece of information without the feeling of being overwhelmed. "The enemy of readability is a wall of text that squeezes out any whitespace, whereas a well-designed document uses whitespace to usher the reader's eyes towards units of text" (Smith, 2021).

Whitespace allows technical writers to choose a method that best suits their audience's needs. For example, leaving a space between long lines of text within an email breaks up blocks of sentences and creates more manageable sections. This reduces the time needed for the reader to pick out key sections of the email and understand the importance of the subject. The reader can then reply to the email with productive feedback because they have a better understanding of what was presented.

Another example of this can be seen in instruction sets where different sections need to be spaced out. By placing spaces both above and below the headings of each section of instructions, the reader's eyes naturally shift focus from one heading to the next, allowing for the F-pattern to take effect and begin scanning the document from left to right (Rea, 2021). In the hands of a technical writer, whitespace is a powerful option when it comes to directing attention toward key points of information and maintaining visual clarity within a document.

# **Repetition**

## ***What is Repetition?***

Repetition is the concept of maintaining consistency within a document by ensuring that elements such as headings, text, and alignment are formatted the same way across the entire page. Suppose a technical writer chooses to use a level 2 heading for a subtopic when creating a document for a proposal. In that case, all subtopics must have the same heading level across the entire document. By doing so, repetition helps to create continuity within a document, as all elements are similar to their previous iteration (Wozencraft, “9.6 Repetition”, n.d).

In addition to maintaining consistency, repetition also helps to achieve easy readability by establishing a pattern that the reader can follow. When a reader notices that a pattern exists within a document, such as repeated font colors for subheadings or pauses before a new heading, they will identify that a new topic is about to be introduced and can continue reading without feeling the need to check their location within the page. As a result, this allows the readers to become more invested in the content as they are less likely to search elsewhere (Mack, 2019).

## ***Best Practices for Repetition***

When it comes to repetition, several practices should be followed to best maintain professionalism and overall appeal for your document:

Headings should follow the same format throughout the entire document. If you have multiple level 2 headings that are used to introduce subtopics, then each level 2 heading should have the same format. (Wozencraft, “9.6 Repetition”, n.d). This includes things such as font style, line spacing, color, and other key design details. By doing so, the document remains consistent, and readers can identify when a new topic is being introduced.

If you intend to use a bulleted list within your document, or even multiple lists, they should all maintain the same formatting style, with each group of bullet points being the same distance from both above and below the text (Wozencraft, “9.6 Repetition”, n.d). For example, if you previously used a bulleted list for a recipe that highlights the ingredients the reader will need, then each bullet point must be in the same style to avoid confusion for the reader.

For the use of visual aids such as graphics or tables within your document, ensure that each visual aid repeats the same format as the last of its type (Pattison, Nicole, 2022). For example, if you include an image and you center-align the image within your document, then every image proceeding the original should also be center-aligned.

## ***Summary***

When it comes to maintaining professionalism within your document, repetition can be a valuable tool in its ability to maintain consistency and style when moving from one section to the next. Just as different elements need different formats to distinguish themselves from one another, similar elements need to maintain consistency to inform the reader that they are related (Pattison, Nicole, 2022).

By ensuring that formatting is consistent within each page of your document, your readers will be able to engage more with the content you present as they can begin to understand the visual patterns and cues of your work, allowing them to fully indulge in the ideas you wish to communicate. Documents such as newspaper articles thrive from this by maintaining consistent design elements such as headlines or covers that allow the reader to identify the section they are reading without having to look twice at the title name (Wozencraft, “9.6 Repetition”, n.d). Repetition offers various options as for how you as a technical writer can express your creative designs to your audience while maintaining a consistent and easy-to-follow style.

# Text

## *The Importance of Text*

Text is the main form of communication between technical writers and the audience. With each line that is added to a document, technical writers present an idea to the reader that they hope may shed a perspective they may not have previously known. How a writer chooses to represent this text, either through language or through formatting, directly influences how the audience will approach the document. For example, if a writer wishes to produce a project proposal for a new form of water filtration system, they may try to express ideas in a more sophisticated sense as they would assume their audience has experience with this form of technology.

Text can come in many different forms: such as in style, size, or color. Each of these brings a unique method of presenting information to your audience in a manner that is both creative as well as easily readable. For those who may have a challenging time reading small print, a technical writer may wish to provide accommodation by increasing the size of the text to best suit their needs. This allows a wider audience to be able to enjoy the document by reducing the barriers to entry they may have due to medical conditions or other external factors. How technical writers choose to design the style of text directly translates into the reader's ability to understand the presentation.

## *Differences Between Typeface & Font*

Text can be described in two different forms, those being typeface and font. These terms are often confused with one another, but they have key differences that set them apart:

Font is described as the individual designs contained within each family of typeface, with each having certain characteristics such as the size and weight. Size refers to the amount of space that a character takes up on a page and is measured in points, while weight refers to the thickness of each character of text—such as bold for thick dark characters or italics for thinner and more slanted text (Masey, 2017).



Helvetica 35 Thin  
Helvetica 45 Light  
Helvetica 55 Romain  
Helvetica 65 Medium  
Helvetica 75 Bold  
Helvetica 85 Heavy  
Helvetica 95 Black

**Figure 5.4** "Examples of Typeface" (Wozencraft, "9.5 Contrast", n.d)

The following image in Figure 4.1 demonstrates an example of different font styles from the Helvetica typeface, with each font representing a specific boldness to the text as well as the size that it will take up on the page when applied. We can see that “Helvetica 95 Black” is a very bold font style, which may be useful for design elements such as headings to which you want to draw the reader's attention. These font styles each have their own use case, such as serif font styles being used for body text within a document. This is due to a feature of the typeface in which they contain small perpendicular crosslines known as “feet” which help to distinguish similar letters or symbols (Smith, 2021).

A typeface is defined as a collection of different families of fonts that have distinct designs for each character of text. The main difference between typeface and font lies in the fact that typeface only refers to the name of the design and does not include aspects such as the size (such as 8pt, 12pt, etc.) or the weight (bold or italic) of these designs (Massey, 2017). Figure 4.2 represents this concept:

The image displays three examples of sans-serif typefaces stacked vertically. The top line reads 'Gill Sans', the middle line reads 'Helvetica', and the bottom line reads 'Futura'. Each word is centered and rendered in a large, bold, black font against a plain white background.

**Figure 5.5** "Examples of Font" (Wozencraft, "9.5 Contrast", n.d)

The following image in Figure 4.2 shows three common typefaces of the sans serif family. The designs of the text are shown, however, there is no mention of the size of the typeface, as well as the weight that each will have. Technical writers would have to preview this typeface to identify the sizing and weight this family would have and how it would affect their current text.

### ***Font Color***

Changing text color can be used in both creative and practical applications. Most word processors by default have text color preset to black. This provides the highest contrast amongst the default white page; however, technical writers may wish to change this to promote a certain theme or message (Beck, n.d). If a writer wants to create a recipe book that involves items such as seafood, change the font color of the text to dark blue to better fit the overall theme of the recipe. This allows for a more pleasant viewing experience for the reader, as the human eyes are naturally drawn to bright colors that stand out from one another (Rea, 2021).



In addition to bringing creative expression into your document, color can also be used to enhance the readability of the document—especially for those with visual impairments. As previously stated, the human eyes are drawn to places of contrast between bright colors, and as a result can grab the reader’s attention to key points of the text. A good example of this can be seen in resumes; the writer may change the color of their name to be a bright red to distinguish itself from the preexisting black/white color scheme (Smith, 2021). This causes the potential employer’s eyes to immediately dart to the applicant’s name and become the focal point of the document. When used properly, the use of color provides many tools for a technical writer to enhance the flow of a document.

## ***Best Practices for Font/Typeface***

When choosing the text style of your document, be sure to follow these general guidelines to best accommodate your readers:

Ensure that the selected typeface can be easily read by the audience—especially for the visually impaired. Common choices for technical documents are options such as the Sans-serif, Serif, Monospaced, or Roman styles, which have been shown to improve readability for those who suffer from conditions such as dyslexia (Massey, 2017). Most word processors provide writers with Arial font—a sans-serif typeface—by default.

Ensure that the font is of enough size to where it can be easily read by the reader. For the main text of the document, if you were to select the Times New Roman font such as the text seen in this chapter, a font size of approximately 8-12 points is the standard, as this size is recommended by the Accessibility for Ontarians with Disabilities Act (AODA) for those who may have visual impairments (Smith, 2021). This standard also applies to those who may be older, as they may not be able to see smaller-sized text.

Avoid using too many different font styles, as this may confuse the reader in distinguishing certain elements of the document. Limit the number of different font styles to no more than three different styles, which should be used for different elements such

as headings and main text (Beck, n.d). For example, a technical writer may want to use a serif font for the main text so that similar characters can be easily distinguished, while also using a font such as Times New Roman for the headings of the document. Readers are better able to identify patterns within the font styles and know when a heading is about to introduce a topic.

When using bold or italics within your document, be sure not to overuse them. These two styles serve distinct purposes: boldface is most often used to direct the reader's eyes to key elements such as titles and headings, while italics are used to direct the reader's eyes to specific keywords or phrases within a text (Smith, 2021). The reader may have a hard time understanding what should be considered key points of information which will result in miscommunication of ideas.

If a technical writer chooses to change the color of the font, ensure that there is enough contrast between the font color and the color of the page. For example, if a writer were to use a gray font on a white background, the reader may have a harder time distinguishing between the two colors as they are more closely related than black and white.

It is also important to take those who may have color blindness into account. The closer two colors are to one another, the harder it will be for that reader to see (Smith, 2021). Use color as a means of emphasizing key points within your document and should be appropriate to the message you are trying to portray to your audience. It is often best to choose a color scheme consisting of multiple related colors to create a central idea for your theme (Beck, n.d).

## ***Summary***

Text serves as the backbone of a technical document, allowing technical writers to freely communicate with their audience. Additionally, it shows them unique perspectives from a previously unknown point of view. Through the use of tools such as font styles and

color, as well as other design elements like headings and alignment, technical writers have complete control over how the reader approaches a document.

Serif-based typefaces such as Times New Roman can help to ensure that readers can effectively read your document by distinguishing similar characters from one another. When used together with bold or italic typefaces, a technical writer can separate key pieces of information by creating visual cues for the reader (Smith, 2021). If a technical writer creates a set of instructions for how to prepare a meal that may require extensive ingredients, the writer can use italics to separate the ingredients from the directions. This allows the readers to immediately understand what ingredients they need and can make the necessary preparations before beginning.

Font color can also help to emphasize information as well by creating contrast between elements of the document (Beck, n.d). Such as in the previous example, color can be utilized by creating section headings with bright colors that separate themselves from other pieces of the document. This will draw the reader's attention to the headings and allow them to understand each step of the process. This is effective in presenting information to those who may suffer from disabilities such as dyslexia or color blindness. as it creates an easier indicator than the standard black/white color scheme (Massey, 2017)

## **Conclusion**

Several key elements play into the design of a technical document, with each helping in a specific attribute that the technical writer needs to best communicate their ideas to their readers. Headings and text define key points of reference and direct the viewer's eyes naturally across the page, while other elements such as alignment and repetition help to maintain visual clarity by consistently repeating format choices that best suit the topic idea. Whitespace maintains overall unity within the document by using the negative space contained within the page to break up information into smaller and more digestible pieces of content for the reader.

When these elements are used in conjunction with one another, the final result is a document in which the reader can successfully engage with the content presented to them, their eyes naturally progressing along the page with little to no visual disturbances.

Key information is clearly defined, as well as contained within their categories so that one does not overpower another. Visual cues through repeated patterns inform the reader of upcoming topics that may be of interest, while the page allows for breathing room through the use of spaces and indentations, leaving the reader with an open space in which they can traverse as they please. Regardless of the document type, these elements play a crucial role in how you wish to present not only your ideas but yourself as a whole.

# Graphics

## The Importance of Graphics in Technical Communication

Graphics play a major role in technical communication by helping the reader understand complicated written ideas and visual trends in data in a document.

Graphics can aid the reader:

- **Enhance Understanding:** Graphics can emphasize essential information more tangibly.
- **Highlight Key Information:** Graphics highlight important data points or trends that can be emphasized more effectively through visual means rather than written text alone.
- **Improve Retention:** Visual memory is often more reliant on retaining information and therefore helps one retain written text when paired together.
- **Accessibility:** Graphics can help aid those who have difficulty reading, have a disability, or help non-native speakers comprehend the text.
- **Aesthetic:** Graphics can often aid in the aesthetics of a document by following a certain color scheme or aiding the design through visual elements such as logos, but overuse is usually discouraged in technical communication.

## Major Types of Graphics

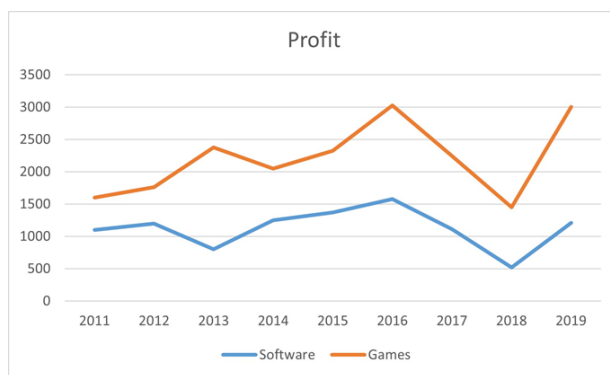
Various types of graphics can be used in technical communication, each one with a specific purpose in aiding the written text. Charts and graphs help present data in a

visual format. They allow readers to quickly grasp trends, comparisons, and relationships within data sets.

## Graphs

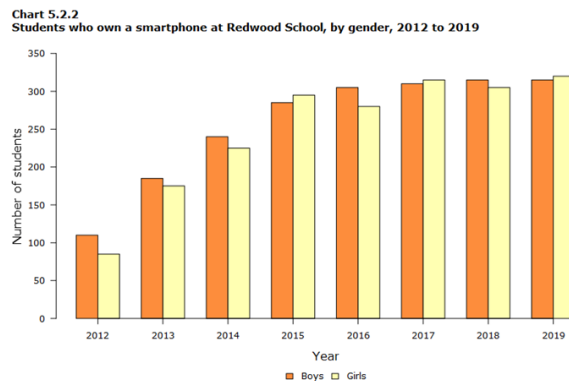
Graphs plot a set of points on a set axis to show and compare numerical data, and as such are useful for showing trends, cycles, cumulative changes, relationships between variables, and distributions.

- **Line Graph:** Used to measure changes in a variable or compare trends over a period of time.



**Figure 6.1** Example of a double line graph comparing the profits between games and software over time.

- **Bar Graphs:** Uses either horizontal or vertical bars that extend to different heights to depict value or compare the items between different groups over time.

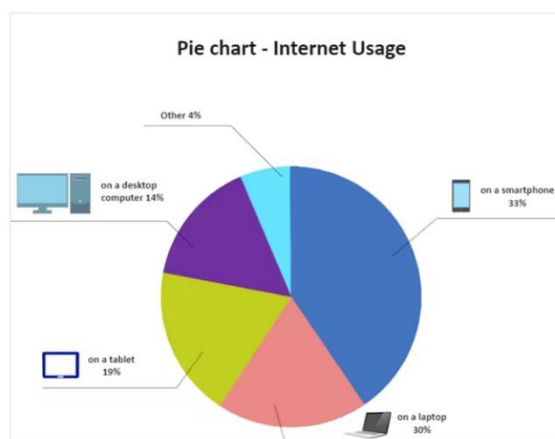


**Figure 6.2** Example of a double bar graph comparing the number of boys and girls who own a smartphone over a period of time.

## Circular Graph

Circular graphs are used to present parts of a whole by visualizing the percentage of each distribution.

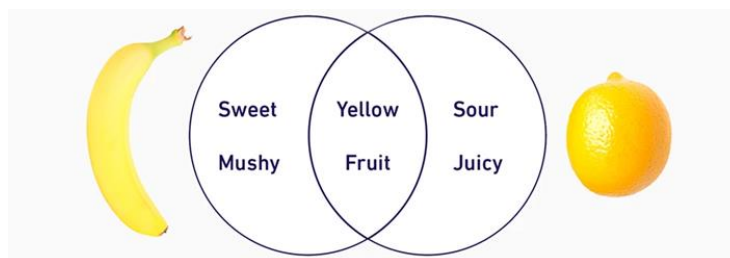
- **Pie Graph:** Often described as slices of a pie used to compare each part's proportion of a whole in terms of area.



**Figure 6.3** Example of a pie chart comparing the internet usage between electronic devices.

- **Venn Diagram:** A Venn diagram may have two or more circles and is used to show the overlapping relationships between two or more data sets.

Example:



**Figure 6.4** Example of a Venn diagram comparing bananas and lemons.

## Tables

Tables are the best graphic to use when readers need to focus on specifics. They display two or more variables of data, such as one data set being a series of items and the other being attributes those items share like quantity, description, type, size, or color.

- **One-Way Table:** Used to compare items based on frequency.

ID	Customer	COVID
1	Arvind	Positive
2	Mascha	Negative
3	Alejandra	Negative
4	Blaise	Positive
5	Stuart	Negative

**Figure 6.5** Example of a one-way table comparing covid tests results to customers tested.

- **Two-Way Table:** Used to compare two categories based on frequency.

	Boys	Girls	Total
Cooked food	18	22	40
Packed lunch	17	33	50
Total	35	55	90

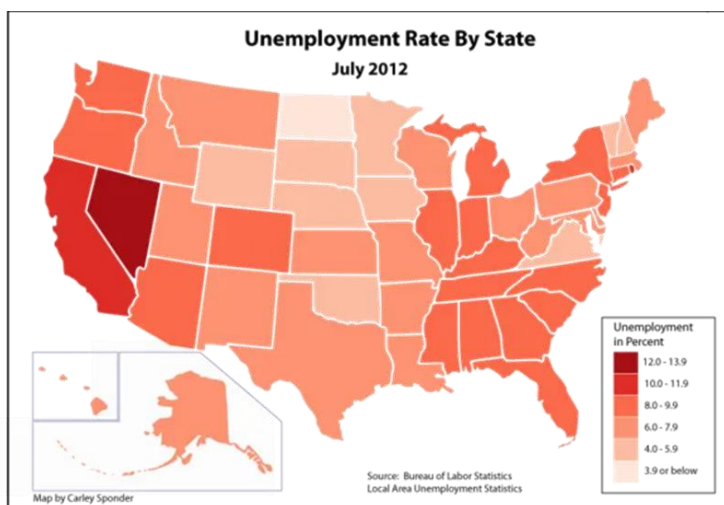
**Figure 6.6** Example of a two-way table comparing what type of lunch boys and girls brought.



## Maps

Maps can be used for different purposes to show a simple road map or visualizing complex numerical data.

- **Choropleth (Quantitative):** Used to compare geographical regions in relation to a variable. Headings/Subheading



**Figure 6.7** Example of a choropleth map visualizing unemployment rates in each state.

- **Weather Map (Non-Quantitative):** A map showing the state of the weather over a large area.

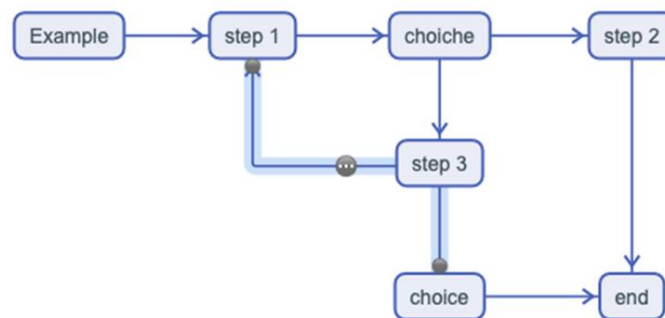


**Figure 6.8** Example of a weather map showing rain coverage over Orlando, Florida

## Charts

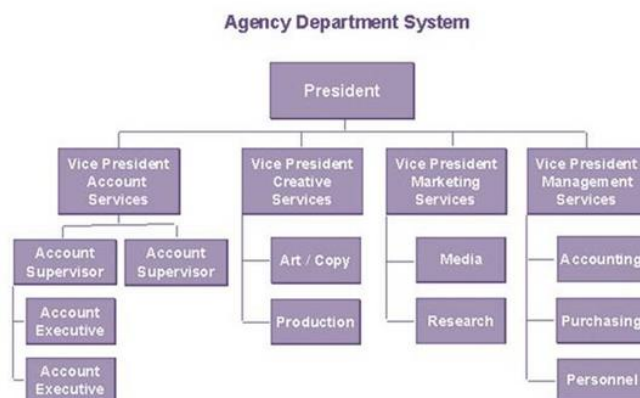
Charts are graphs that do not rely on numerical values and provide a visual roadmap that can help the reader better understand the written text.

- **Flow Charts:** Flowcharts are used to describe a process in a step-by-step visual.



**Figure 6.9** Example of a simple flow chart.

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



**Figure 6.10** Example of an organizational chart showing the job hierarchy of an agency department.

## Photographs

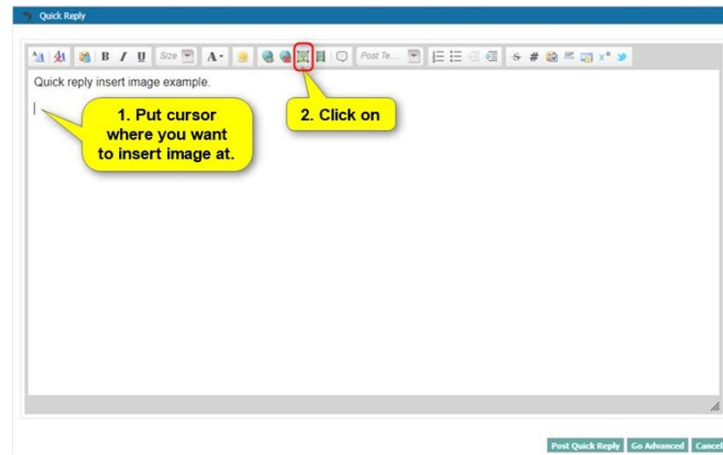
Photographs provide detailed visual representations of objects and environments and can help aid the reader in visualizing the written text through a realistic portrayal.



**Figure 6.11** Example of a x-ray photograph visualizing a broken arm.

## Screenshots

Screenshots can be used to capture and share error messages for troubleshooting, save memorable moments from a video or game, provide step-by-step guides or tutorials, or document important information that cannot be easily saved in other ways

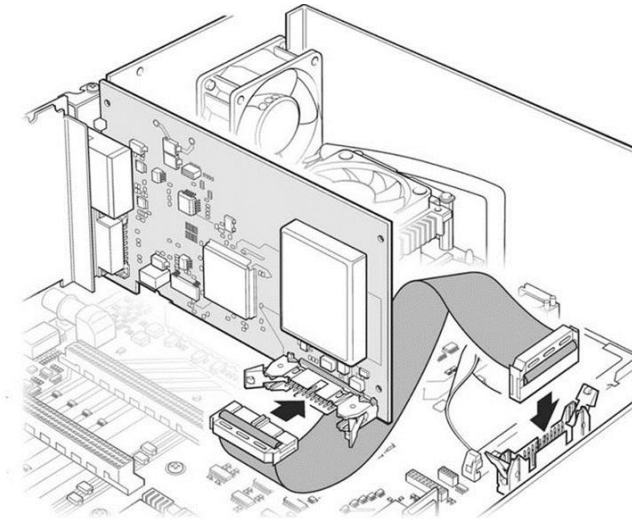


**Figure 6.1 2** Example of a screenshot on a messaging application showing the steps on how to paste a photo.

## Illustrations

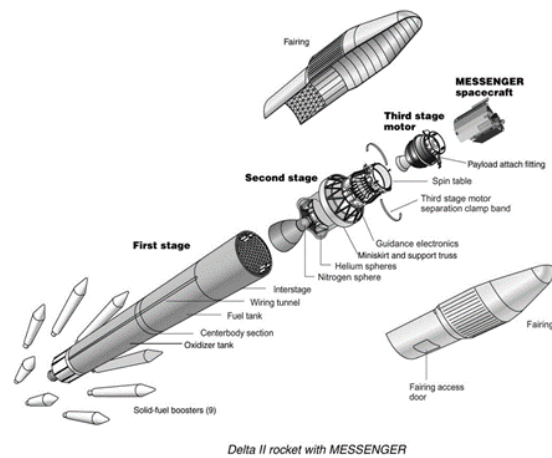
These include drawings, sketches, diagrams, and technical illustrations that depict objects or concepts that may need to be photographed. They are useful for showing detailed parts or exploded views of machinery.

- **Technical Illustrations:** Illustrations that visually communicate information of a technical nature. Technical illustrations can be component technical drawings or diagrams.



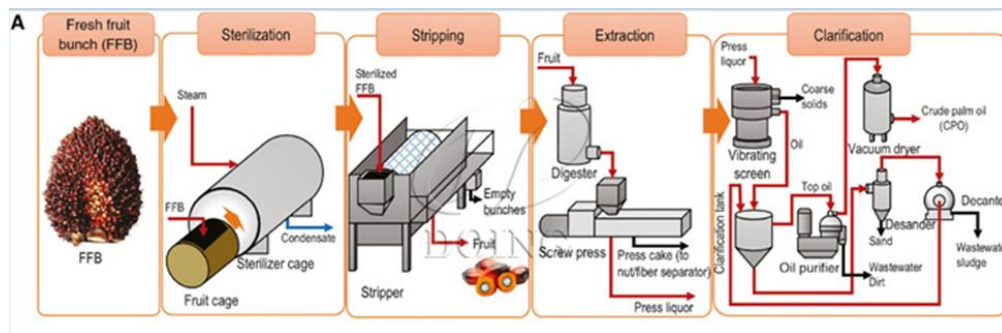
**Figure 6.13** Example of a technical illustration of an interface card conveying placement of the interface cable.

- **Exploded View Illustrations:** Illustrations that show parts of the object separating to show the relationship among the parts of a whole.



**Figure 6.14** Example of an exploded view illustration showcasing Delta II rocket with MESSENGER.

- **Process Flow Diagrams:** Process flow diagrams illustrate the steps in a process, often used in manufacturing.



**Figure 6.15** Example of a process flow diagram for palm oil production.

## Symbols

Symbols and icons are valuable tools in global technical communication. Many are internationally recognized and used in airports, train stations, hospitals, and international manuals. Using symbols and icons in technical documents can greatly reduce the need for words.



**Figure 6.16** The International Symbol



**Figure 6.17** The red cross symbol

## General Rules for Using Graphics

When choosing graphics to use for your document, keep these general rules in mind to ensure that the images coincide with the written text.

- Make sure to choose graphics that are concise and will effectively convey the information to the reader. Graphics should enhance the document and not create clutter.
- Introduce and explain each graphic through captions. Visuals without descriptions/captions are confusing to the reader and disrupt the clarity of the document.
- Make sure the graphics are legible and large enough for the reader to see.
- Make sure to maintain a consistent style and formatting of your graphics throughout the document.

## ***Graphic Placement***

Once you have chosen a graphic to use in your document, placement is important to ensure the image is relevant to the text.

- **Proximity:** Place graphics near the corresponding text so the reader can easily reference them.
- **Logical Flow:** Graphics should be placed logically with the corresponding text. For example, the **Process Flow Diagram** of producing palm oil should be placed after/next to the process description.
- **Alignment:** Graphics should be aligned consistently throughout the document for clarity and organization. Use either left, center, or right alignment throughout the document.

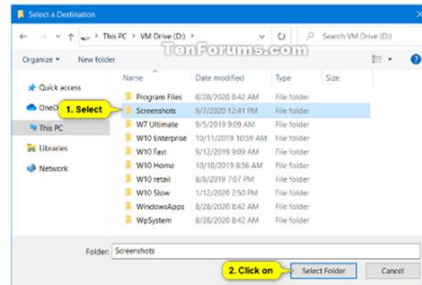
## **Image Layout**

Many word-processing applications allow for the layout of the image to be formatted. Use these options to organize graphics throughout your document.

- **In-line:** The standard option for most word-processing applications. The graphic is limited to the position in the text, meaning it can be placed after any sentence.

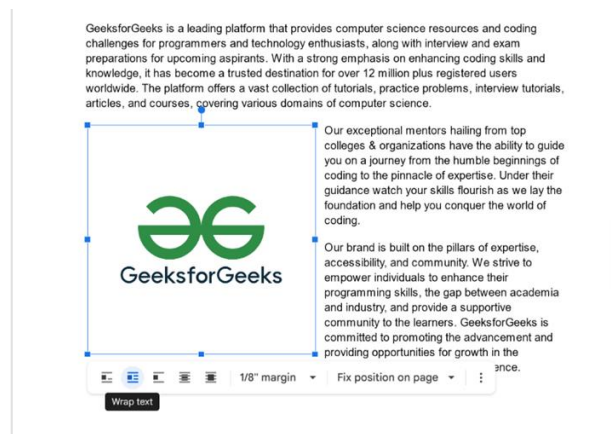
## Photographs

Photographs provide detailed visual representations of objects and environments and can help aid the reader in visualizing the written text through a realistic portrayal.



**Figure 6.18** Example of graphic placement. The graphic is placed below the immediate sentence.

- Wrap Text:** This option allows for the graphic to be positioned anywhere in the document. The text will wrap around the graphic eliminating all white space.



**Figure 6.19** Example of wrap text. The text wraps around the graphic depending on placement.

- Break Text:** This option also allows for the graphic to be positioned anywhere in the document, but will separate the lines to make space for the graphic.



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**Figure 6.20** Example of break text. The graphic can be placed anywhere in the document and will evenly break the text.

## Image Captions

Image captions are optional but can be a simple way to provide additional information about an image, such as its meaning or location. Including captions for graphics can also help organize your document and help the reader reference the text.

## Descriptive Captions

These are concise and informative captions that can help further describe the written text.

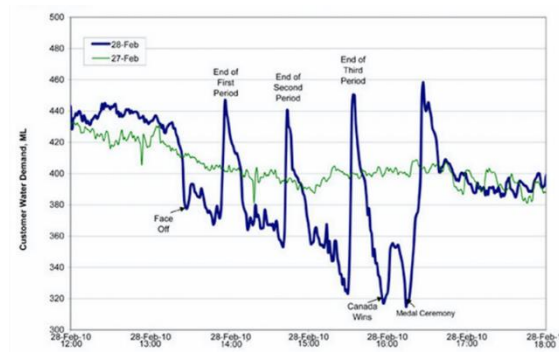


**Figure 6.21** The above image shows a student, standing in the STEPS Simulation Lab, practicing using a blood pressure cuff on a seated student.

The caption accurately describes what is happening in the photo. It focuses on the key details of the image that are relevant to the context written in the document.

## Numbering

Graphics such as charts or tables should be labeled with a number (figure) followed by a descriptive caption or title. They should describe the data shown, point out important features contained within the graphic, or include interpretations of the data.



**Figure 6.22** Water Consumption in Edmonton during the 2010 Gold Medal Hockey Game.

This numbered caption can be referenced in the text with the figure number and provides a descriptive title that clarifies the purpose of the graphic.

## Citing Graphics

Citing graphics created by another author is equally important as citing written work. Make sure to correctly cite any graphics used with as much information as possible. Also, make sure to apply the appropriate citation style with the information provided.

- Image creator's name (artist, photographer, etc.).
- Title of the image.
- Date the image (or work represented by the image) was created.

- Date the image was posted online.
- Date of access (the date you accessed the online image).
- Institution (gallery, museum) where the image is located/owned (if applicable).
- Website and/or Database name.

## ***Citing Images in MLA, APA, Chicago***

These are the guidelines for the most common citation styles:

### ***MLA***

Citing images in-text, incorporating images into the text of your paper, works cited.

### ***APA 6th ed.***

Citing images in-text and reference list: Figure 2. Table of symbols. Adapted from Case One Study Results by G. A. Black, 2006, Strong Online. <https://www.strongonline/casestudies/one.html>. Copyright 2010 by G.L. Strong Ltd.

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**Figure 6.23** Table of symbols.

### ***Chicago 17th ed.:***

Citing images, footnotes, endnotes, and bibliography.

# Technical Communication Genres

## Proposals

A proposal's primary goal is to convince the reader that the idea or service suggested is worth the venture. Effective proposals demonstrate a deep understanding of the problem, offer a clear and innovative solution, and detail the plan for implementation, highlighting expected outcomes and benefits. The strength of a proposal lies in its ability to communicate these elements convincingly and coherently to the intended audience.

Proposals serve multiple purposes. First, they establish the credibility of the writer by highlighting their knowledge, expertise, and thoroughness. Second, they provide a structured approach to addressing a specific problem or opportunity, ensuring that all aspects are prepared for. Lastly, a strong proposal can secure funding, approval, or support by articulating the value and feasibility of the proposed project.

## *Structure*

The structure of a proposal is crucial to its success; it provides a clear and logical framework for presenting the information. A well-structured proposal ensures that all necessary components are included, and that the reader can easily follow the argument. It guides the reader through the proposal, making the document accessible and persuasive. A clear structure not only helps in organizing thoughts but also enhances the readability and professionalism of the proposal.

## Project Summary

The project summary is a concise overview of the entire proposal. It should outline the problem, the proposed solution, the implementation plan, and the expected benefits. It must be compelling and informative while also summarizing the core elements of the proposal in a way that highlights its importance and feasibility.

## **Project Introduction**

The project introduction sets the stage for the entire proposal. This section aims to establish the significance of addressing the problem—including relevant background information. It explains why the project is necessary and what objectives it aims to achieve. Providing a strong introduction helps the reader understand the context and importance of the project, making a case for why it should be undertaken.

## **Implementation**

The implementation of the proposed solution is laid out for the audience outlining the methods, strategies, and timeline for completing the project. It should provide a clear and detailed roadmap that explains how the project will be carried out from start to finish. The goal is to demonstrate the feasibility, careful planning, and a thorough understanding of the project's requirements and potential challenges the plan has. Allowing for the audience to put their own trust into the project.

## **Personnel**

Identifying the key individuals involved in a project is crucial for establishing the project's credibility and ensuring successful execution. This part of the proposal should detail the roles, responsibilities, and qualifications of each team member and highlight the expertise and experience necessary to bring the project to fruition.

## **Budget**

Providing a detailed breakdown of the financial requirements for a project is crucial in any proposal. Showing the budget helps in demonstrating that the project is financially viable, and that the proposer has carefully considered all necessary expenses. It ensures transparency in resource allocation and is often a key factor in securing funding and approval.

## ***Conclusion***

The conclusion should summarize the key points of the project and restate the problem with the solution emphasizing the expected benefits and outcomes. This final part of the proposal should be designed to leave an impression on the audience, encouraging them to approve and support the project.

## **Appendices**

The appendices provide valuable support and context for the main proposal, offering deeper insights and substantiating claims without cluttering the project. Usually, this section is filled with raw data or interview transcripts. The information here is normally too long or too detailed to include into the main project.

## **Audience**

When the audience is identified, adjust your tone and complexity accordingly. So that if your audience is non-technical then explaining the concepts in straightforward terms will help them understand more easily.

## **Jargon or Vague Writing**

Avoiding jargon or vague language is essential. Using overly technical language or ambiguous terms can confuse the reader and obscure the main points of your argument. Being clear and precise ensures that your message is easily understood and leaves no room for misinterpretation.

## **Unclear Figures**

Unclear figures can significantly undermine the effectiveness of a proposal. When data and statistics are presented ambiguously, they lead to misinterpretation and reduce the credibility of your arguments. Ensure all numerical data and statistical information are presented accurately and precisely.

## **Inconsistent Formatting**

Inconsistent formatting can distract readers and make a proposal appear unprofessional. This involves using the same fonts, headings, spacing, and alignment through the document. This makes it easier for readers to follow the structure and flow of the information. Utilizing a template can be beneficial when first learning how to format properly.

## **Instructions**

Instructions are a crucial part of technical communication. They help users navigate tasks and processes efficiently. They aim to reduce confusion and errors by providing clear and logical steps. Visual aids can help improve understanding as well and make complex procedures easier to follow. Instructions can also provide safety warnings and troubleshooting tips to address potential issues. Together these elements allow for users to have an enhanced experience and enable them to achieve their goals with ease.

## **Effectiveness**

Effectiveness is essential in technical communication. It allows for information to be clearly conveyed and accurately reach the target audience. To do this properly you can customize language and structure to match the audience's knowledge level, organizing content logically with clear headings and sections and using visual aids like charts and graphs to enhance comprehension. This helps promote user friendliness and creates a more positive user experience.

## **Presentation**

Presentations are essential tools in technical communication. They are used to share ideas or data in a professional, academic, or technical context. They combine words and visual aids to enhance understanding of a topic. They also can enhance engagement by being entertaining as well. Effective presentations have clear objectives and ensure the audience grasps the purpose of the presentation. Visual aids should be clear and relevant



and support the spoken content without overwhelming the audience. Delivery, eye contact, body language, and vocal tone are all crucial factors when it comes to audience engagement. You can also make the presentation interactive with Q&As. This makes the presentation not only more informative but also memorable and impactful.

## Reports

Reports are a form of technical communication which allow for detailed documentation on topics, events, or projects across various professional settings. Their goal is to present data and insights clearly.

They typically include a:

- Title page
- Abstract
- Introduction
- Methodology
- Results
- Discussion
- Conclusion
- Recommendations

The abstract or executive summary provides a brief preview of the main points, while the methodology section ensures transparency of data collection and analysis. Results are often illustrated with visual aids like charts and graphs followed by a discussion of the results. Finally, a conclusion is made to summarize the entire report to the audience.

## Formal vs. Informal

Formal and informal technical communication serve different purposes and are suited to each of the various contexts and audiences. Formal communications are in documents such as reports, research papers, and user manuals. They use a professional

tone and precise language. This type of communication is commonplace in official settings where accuracy and professionalism are essential.

In contrast, informal technical communication—such as emails, memos, and instant messaging—is more casual and conversational. It allows for quicker communication and information exchange. This allows for more flexibility and a delicate touch.

## **Progress Reports**

Progress reports are key methods of technical communications that keep stakeholders informed about the status of projects or tasks. This allows everyone involved to stay up to date on certain issues going on at the time of the projects. They are delivered at specific time intervals—oftentimes weekly or monthly. They begin with a summary and outlines the project objectives and purpose of the report. They address any challenges encountered and their impact and provide ways to mitigate these issues. Effective progress reports maintain clarity and proper alignment. They keep all parties updated on project status and prepared for future development.

## **Organization**

Documents usually start with introductions that provide background, state the purpose, and preview the content. If the document is longer, then a table of contents is beneficial. When readers can easily navigate the sections, it allows for an easier experience. The main body follows with coherence, engagement, and accessibility by presenting information logically as it unfolds. Organizing information effectively is crucial for clarity, logic, and comprehensiveness.

## **Chronological Order**

It helps to work on information in order of time in a professional setting. It allows the audience to be able to visualize and understand the topic at hand when it is in order of when it happened. It can also explain why certain things happened when they did. It also can help with problems that occurred during the projects.

## **Work Completed**

Work completed reports are essential in professional settings, tasks, or projects. These track progress like the progress report, but they are more for finalized tasks instead of tasks actively being worked on. They start with an overview of the reporting period and summarize a set of goals completed.

Each completed task is discussed and detailed on how it was completed. This includes the scope, resources, challenges, and outcomes achieved. This structured approach offers a comprehensive view of accomplishments and highlights any deviations from the original plan or unexpected issues.

Additionally, work completed reports often include quantitative data such as metrics or key performance indicators (KPIs) to measure progress against predefined targets. This data-driven approach enhances transparency and accountability, enabling stakeholders to assess effectiveness and make informed decisions. Overall, these reports play a crucial role in fostering organizational transparency, evaluating performance, and guiding strategic planning in professional environments.

## **Emails and Memos**

Emails and memos are essential communication tools in organizational settings, each serving distinct purposes and audiences.

Emails are versatile for quick, asynchronous communication both within and outside an organization. They can convey information, request action, provide updates, or initiate discussions. While less formal, emails still require clarity and professionalism.

Typically, an email includes a salutation, a concise body addressing the message's purpose, and a closing remark. You can add attachments, making emails ideal for sharing documents and reports.

Memos (short for memorandums) are formal written messages used for internal communication within an organization. They convey official information, announce policies, provide updates, or request action from colleagues or team members.

Memos follow a structured format with headings like:

- To
- From
- Date
- Subject

The body presents information logically, often with sections and subheadings. Unlike emails, memos are typically distributed physically or electronically within an organization's internal network.

The main differences between emails and memos lie in their formality, structure, and intended use. Emails are informal, allowing for quick exchanges and responses, suitable for daily communication. Memos, on the other hand, are formal, structured documents used for conveying official information or directives within an organization. While emails are directed to individuals or small groups, memos are distributed more broadly within departments or organizations to ensure comprehensive communication.

Both emails and memos are integral to internal communication strategies, each serving specific purposes based on the message's formality, intended audience, and organizational context.

## ***General Advice***

Effective technical communication hinges on clarity, efficiency, and professionalism. Always proofread and edit your work for grammar, punctuation, and overall coherence. Maintain a professional and respectful tone in all communications, adapting your style to suit the context—formal for reports and more relaxed for emails

and memos. Provide adequate context and background information to help your audience grasp the significance of your message. Continuously seek feedback from colleagues or supervisors to improve your communication skills and stay updated on best practices and emerging trends in technical communication.

## **Style and Tone**

Style and tone are essential elements of technical communication that shape how your message is perceived and understood by your audience.

In technical communication, clarity and precision are crucial. Use straightforward language to make your message easily understandable, especially when explaining complex concepts or procedures. Avoid unnecessary jargon and technical terms unless they are essential or familiar to your audience. Maintain a consistent style throughout your document or presentation to create a cohesive reading experience and reinforce professionalism. Adapt your style based on the context—formal for reports or proposals, and more casual for emails or memos—tailoring it to suit the audience and purpose.

The tone in technical communication should be objective, neutral, and professional. Avoid emotional language or biased viewpoints, focusing on presenting information objectively and impartially. Consider how your tone might influence how your message is received by your audience. Even in formal settings, maintain a courteous and respectful tone to foster positive interactions. When communicating with colleagues or stakeholders, adjust your tone to match the relationship and context. For instance, emails and memos can adopt a more conversational tone while still upholding professionalism.

Mastering style and tone allows you to effectively convey information and engage your audience across various communication formats and contexts.

## **Accessibility**

Accessibility in technical communication is crucial to ensure that information is available and understandable to everyone, including individuals with disabilities or diverse needs. This principle emphasizes inclusivity by making sure that all users can

access and benefit from the information provided. Key considerations include using clear, simple language that is easy to understand and avoiding complex jargon or technical terms that could be confusing. Incorporating visuals like diagrams and charts helps supplement text-based information, making it accessible to those who may rely on screen readers or other assistive technologies.

Attention to color contrast and design practices that adhere to accessibility guidelines, such as WCAG, helps users with visual impairments or color blindness distinguish between different elements effectively. Conducting usability testing and gathering feedback from users with diverse needs allows for continuous improvement in making technical communication materials accessible to a broader audience.

# Communicating Online

In today's digital age, the way technical communicators communicate online may seem insignificant at first glance—typing a few words and hitting send. However, effective online communication is important, particularly in academic and professional settings. Understanding online communication etiquette and finding the difference between different forms of communication can greatly enhance our interactions. It is essential to grasp the differences between synchronous and asynchronous communication. Leverage professional tools such as Office 365 or Google Workspace to bring stability to the writer's workflow and create seamless team communication. Mastering effective collaboration and conflict resolution helps foster a conducive work environment.

Making sure the writer uses secure online communication practices is vital for safeguarding sensitive information and upholding the integrity of digital interactions. Efficient email management is crucial for keeping the writer's correspondence neat and organized. Moreover, emphasizing accessibility and employing tools to enhance accessibility ensures that our communications are inclusive, thereby fostering a more inclusive and productive digital environment.

## Online Communicating Etiquette

When engaging in professional communication, whether it is at school or work, it is essential to observe proper etiquette as it greatly influences the quality of interactions. Although we are generally familiar with etiquette for face-to-face communication, it is crucial to take into consideration the nuances of online communication. It is important to pay attention to various aspects, such as avoiding errors or misspellings that could result in misunderstandings or conflicts with the recipient. Furthermore, it is vital to consider the audience when sending text messages and to assess whether using slang is suitable in a given context. Additionally, meticulously proofreading emails and messages is imperative to guarantee accuracy and correctness. Addressing these considerations can contribute to establishing a more positive and efficient work environment.

## ***Emailing***

When composing emails, it is important to ensure that the writer is being respectful, which includes being mindful of tone throughout the email. There are several ways the writer can achieve this. One simple method is to utilize professional resources such as Grammarly, Word, or Hemingway. While these tools may not always be perfect, they can help the writer comprehend how the email is being perceived. They can also check grammar and spelling errors, as well as readability and sentence structure. This is especially useful when trying to find the proper wording for an email or document. Another approach, if the writer does not have access to such tools, is to read the email aloud. Doing so not only helps the writer gauge the sound of the email but also allows the writer to identify any errors, awkward phrasing, or unclear messages. When reading aloud, it is beneficial to put the writer in the recipient's shoes and imagine receiving the email for the first time rather than just focusing on the writer's own perspective (LinkedIn, n.d.).

When communicating with important individuals, using emails is often preferred due to its quick and professional nature. Keeping emails concise and to the point can enhance the tone of the message and minimize the risk of confusion or misinterpretation. A lengthy email, such as a 1000-word essay, may not effectively convey the necessary information to the recipient. Since many people check emails on their mobile devices while on the go, it's important to keep emails brief and easy to understand. This approach respects the recipient's time and ensures that the message is clear and accessible. Incorporating detailed documentation and utilizing bullet points can effectively reduce the need for repetitive words within the email (HubSpot, 2023).

## ***Consecutive Email Tone and Clarity***

When expressing concerns, it is important to use positive and clear language to convey the message effectively. Avoiding negative phrasing can prevent misunderstandings that may arise from anxiety or fatigue. By refraining from using negative language and sarcastic remarks, the writer can promote a more productive and harmonious email exchange, minimizing the potential for conflict. When encountering any issues with a recipient, adapting the communication style to be respectful and



considerate can facilitate a quicker resolution. This may involve coordinating a suitable time for a discussion via email and being mindful of the other party's availability.

Effective communication via email entails maintaining politeness. Using a professional greeting sets the tone for the rest of the email. For instance, when emailing a colleague, a casual greeting is appropriate, but when reaching out to a new employer for the first time, a formal greeting is more professional. Incorporating polite words such as "please" and "thank you" demonstrates appreciation and ensures a respectful tone. Understanding online etiquette is crucial for fostering respectful, effective communication and maintaining a positive environment (Indeed, 2023).

## ***Direct Messages Vs. Public Messages***

Understanding direct message (DM) versus a public message can help create effective and efficient communication and collaboration. Direct messages are more for quick responses and questions and one on one private conversations. Using direct messages on most platforms helps create a deeper relationship with someone, sell a product or a service, and keep up to date on the latest news. There are many different platforms to communicate privately, such as text messages, Direct Messages on Discord, messages in LinkedIn, etc. Being able to differentiate between the kinds of DM to send is helpful. People use direct messages for private or sensitive conversations that are somewhat relevant to the team but don't need everyone's attention.

Being able to answer questions is also a key part of using direct messages; these tend to be quick questions that can be answered by a single person. For example, when working on a big group project which requires two or more people to split from the main group, DMs can aid in asking for feedback, questions, and keeping up with the project's progress. The writer can also get more one-on-one check-ins, being able to do that through a dm can alleviate stress for the other person in case they are falling a bit behind schedule. The writer can work together as a team to get back up to speed without having to involve the whole team.

Public messages have different meanings and connotations to them. Most places have something different such as a public discussion post, servers, channels, etc. Using a public messaging place tends to keep transparent and inclusivity between the individuals

and the team. Being able to have everyone access all of the relevant information needed in one place can help lessen the stress of all individuals involved. Not only that but public spaces make it easy to announce policy changes or upcoming events instead of sending a massive email. Instead of making one massive 60+ email, add it to the public messages that most people are going to check.

The writer can also have open discussions and have multiple people to have their input into a certain topic. Being able to collaborate and brainstorm under one public message can make it engage. Reddit is a huge online discussion post forum. However, if someone has any issues or has a question on how they can improve on a certain topic, the writer will find multiple comments stating their own ideas and feedback into the topic. Engaging the team in brainstorming and problem-solving helps bring the team together more often than not.

When using public messages, it is important to contribute to a discussion by staying on topic, and being able to relate and having the message relevant to the discussion post can help ensure the post is easily understandable. Being inclusive as well can be very useful in order to stay out of conflict when using public messages. Allowing and encouraging participation from all members can help lessen the team's stress. Being able to respect and value their opinions is also important for them to feel comfortable. This can help the individuals to feel more recognized and appreciated as it builds a positive and collective atmosphere.

## **Synchronous Communication**

### ***What does Synchronous Communication Mean?***

Having an understanding of Synchronous communication can help the writer decide if this is the preferred or best form of communication for addressing issues. Synchronous communication refers to a real time exchange between two or more people. When doing synchronous communication all of the participants need to be engaged and present simultaneously. All communication is in real time communication which means that all of the conversations are live with an immediate response to the other person. Immediate responses can include getting feedback, answering questions, and having a

conversation. This allows for a good dynamic in conversation without messing up the flow of the conversation.

Being able to have real time interactions not only allows for immediate responses but also being able to get contextual awareness, people involved are aware of the context and can adjust their communication to who is needed in that specific time. They can also update work immediately following the feedback needed. For example, in a Zoom meeting, participants can screen share, take turns speaking, and interact, creating a natural flow of conversation.

## ***Tools and Applications***

There are different kinds of tools and applications that can help with synchronous communication online, including phone calls, video conferences using Google Meet, Zoom, Discord, and others. Using a phone call is one of the more limited kinds of synchronous communication as it lacks visual cues. Understanding and seeing body language can help with many social cues; however, during a phone call, the lack of body language can make it harder to interpret the full context of the conversation. Additionally, phone calls can be interrupted by scenarios such as background noise, poor signals, and other factors. However, phone calls offer accessibility features, such as not needing Wi-Fi to call a person and only requiring a signal, making them reliable in low or poor internet locations. Most people now have access to a phone, whether it is their personal device, or one provided by their work.

Other applications include, but are not limited to, Discord, Google Meet, Microsoft Teams, Zoom, etc. Microsoft Teams and Zoom are both similar regarding work environments. They both have video conferencing capabilities, including screen sharing, recording options, and high-quality video format. If the writer cannot participate via video but can join by phone, there is also a chat feature that can be used during or outside of the meeting. They both offer accessibility features, such as being available on multiple devices and supporting third-party applications in case an individual needs something more accessible than what the application provides. They also offer "breakout rooms," which are smaller group discussions within a larger meeting. This is useful if there are 20

individuals in one group and they need to split into smaller groups throughout the meeting.

Using Microsoft Teams is great for comprehensive team collaboration. It offers detailed collaboration tools integrated within the chat, allowing the sharing of charts, files, and project management posts. Since Microsoft has its own ecosystem, it is easily accessible with other Microsoft applications such as Word, Excel, and Outlook. The writer can create threads and channels for multiple side projects to maintain good organization. Microsoft Teams was built specifically for ongoing collaborations, with the goal of enabling a seamless shift from on-site to remote work (Microsoft, 2023).

Zoom on the other hand was mainly made for high-quality video conferences, because of this they mainly focused on virtual meetings and webinars. They excel in different aspects such as the video conferencing features like the breakout rooms, virtual backgrounds, and meeting templates. Recently Zoom added an AI to the zoom meeting system. This is a huge help because when someone is late to a meeting, instead of repeating everything, the writer can ask the chat what was missed and if their name was mentioned, receiving a quick generated response to get caught up. Not only that but they have live captioning during the meeting and that can include multi-language as well in order to be more inclusive towards everyone (Zapirer, 2023).

## ***Video & Voice Call Etiquette***

Video and voice calls are similar in their own ways while also different in many other ways. To prepare for both calls the writer wants to make sure to test out the equipment, this means checking the microphone, internet connection, (and if needed) camera to make sure they are both working properly. Next, the writer should make sure to be in a quiet location; the less sounds there are, the better.

The writer should also familiarize themselves with the platform being used. While teams and zoom are similar in ways they don't have the same layout and each button has a different meaning. If Discord is chosen as the platform, while there aren't a lot of fancy options, it is still necessary to get familiarized with its basic concept. For doing a video conference, there are additional steps to take, including having an appropriate background. Whether that is an actual home background or a green screen, keeping the

background clean and uncluttered can maintain professionalism. Not only that but also wearing appropriate attire to the meeting; the rule of thumb is to wear the attire that would be worn for attending an in-person meeting.

When joining the call the similarities are back: the writer wants to make sure to be on time, speaking clearly, and paying attention to the meeting at hand. While on a voice call, where the writer can't be seen actively paying attention, using verbal cues or the chat box can help make the leader aware that they are acknowledging them. This allows a good flow between the writer and the individuals in the team. If there is a lot of background noise most applications have a noise reduction function where it reduces the noise. The writer can also use headphones for noise reduction and privacy within the meeting.

The writer should be mindful of their environment and be respectful and respect the meeting's privacy such as discussing sensitive information in a public location. If there are interruptions, it is important to be muted when not speaking in order to not interrupt the rest of the meeting.

When the call is finished, giving a farewell in chat or verbal acknowledgement gives a more professional ending towards a meeting. Not only that but starting the next action to create a clear outline of what are the next steps before ending. Whether in a video call or voice call, always make sure to ensure that the other person has finished speaking before ending the call. This is to avoid hanging up halfway through their next sentence. Following up after a call can include sending an email to summarize the necessary key points and next steps that need to happen to achieve the end goal effectively.

## ***Pros and Cons***

When planning the main form of communication, the writer wants to make sure the main form of communication is the best for the team. Synchronous communication has many pros such as immediate feedback on questions and assignments. The writer can make really quick phone calls to stay up to date and any questions or misunderstandings will be immediately addressed, if the correct answer is available at that moment. Not only that but synchronous communication allows for greater engagement. When in a call, whether that is a video or voice, the writer can be actively involved and engaged while talking about upcoming information, pulling up documentation, etc.

Synchronous communication can also build stronger and more personal bonds between all participants. This is crucial in order to start having good team communication and environment. When having a good environment and better team communication the clarity and precision gets enhanced with each meeting. Having clear and detailed instructions and explanations can help make the process smoother and allow for any real-time follow-up questions to be asked if needed. Compared to emailing or text messages it would be at their own discretion instead of real time reply. Collaboration also tends to get better. This includes getting better brainstorming experience and problem-solving sessions, as well as better coordination as a team. A good team environment boosts team spirit and morale instead of bringing it down.

Synchronous communication can also save a lot of time. Instead of emailing or text messaging back and forth not understanding each other's wording, synchronous communication helps with quicker understanding in less time as without waiting for text replies back. To be specific with video calls, they are extremely beneficial, especially for visual learners, as platforms like Zoom, Discord, Teams, they all have screen sharing abilities and that can help showcase information instead of describing it.

Now while those are all great reasons to do synchronous communication there are some cons and, in some situations, asynchronous is better than synchronous communication. In this case when having a synchronous meeting there might be scheduling conflicts, this including one of the individuals being busy, different time zones, having other appointments, etc. The writer and their team need to be present at the same time and sometimes that can be hard to achieve.

There can also be different distractions that happen such as having a meeting in a disruptive time, or having multiple assignments that need to be done while being at the meeting. Because of those different assignments there would be pressure on wanting to get everything done in time. This includes pleasing everyone and having to perform on the spot. Not only that but if a storm or something breaks out 10 minutes before a meeting that can be stressful as it is resource intensive, especially when a clear voice and video quality are needed for the other individuals in the call.

It's also stress-dependent if someone cannot make it to the meeting and it is important for them to attend, it creates a dependency on them to be available. Also, because it is in a meeting or phone call, while some platforms allow for recordings most

meetings are recorded so record keeping and referring to a specific point can be more difficult.

## **Asynchronous Communication**

### ***What does Asynchronous communication mean?***

Asynchronous communication is a form of communication in which the exchange of information does not happen instantly. It allows the user to respond at their convenience. This type of communication is quite common and is used in today's online platforms for remote work, school, and global interactions. Examples of tools for Asynchronous communication include, and are not limited to, the use of email, where the writer can send a message and the recipient can reply at their convenience. Discussion boards, such as Canvas, allow people to post and reply over time, enabling thoughtful contributions. Asana, founded fifteen years ago, is a project management tool where team members can update their progress at their own pace. Studies show that asynchronous communication can increase productivity and flexibility, as it allows people to take time to think and work through their projects or replies without feeling pressured to respond quickly.

While synchronous communication involves real-time interaction, where participants engage in immediate back-and-forth exchanges, asynchronous communication unfolds over an extended period, offering flexibility and convenience. This type of communication is particularly suited for scenarios where instant responses are not required, allowing participants the freedom to ponder and reply at their own pace. Tools like email and project management platforms such as Trello or Asana facilitate asynchronous communication, enabling team members to collaborate seamlessly across various time zones without the pressure of coordinating schedules. Notably, during the COVID-19 pandemic, asynchronous communication methods gained widespread popularity due to their ability to support focused and uninterrupted work. Research even suggests that asynchronous communication can help alleviate stress and enhance

productivity by affording individuals the time to formulate more thoughtful and well-considered responses (Beilenson, 2021).

When texting another professional, you want to maintain good texting etiquette as it is important in order to preserve professional relationships and create clear and effective communication. Research has indicated that using clear and concise messaging helps prevent misunderstandings and improves communication across professional and personal settings (Smith, 2015). To improve texting etiquette, it is essential to communicate clearly and concisely, use appropriate language to convey professionalism and respect, refrain from using emojis except when communicating with close friends or family, and respond in a timely manner in a professional context, avoiding last-minute responses.

## ***Pros and Cons***

Asynchronous communication offers several advantages and disadvantages. One of the main benefits of Asynchronous is flexibility, which allows the recipient to respond at their own convenience. This is particularly beneficial for individuals with busy schedules, as it provides the freedom to engage in communication when it best suits them. Additionally, asynchronous communication allows for record-keeping, enabling both the sender and recipient to access and review previous communications. This documentation can be invaluable for referencing past messages, maintaining a record of interactions, and tracking the evolution of the conversation over time.

Asynchronous communication also has its disadvantages. For example, delayed responses while waiting for replies from the other person can lead to many issues at the professional level, such as problems with the decision-making processes. Miscommunication is another concern. In real-time interactions, there is a chance that the recipient might misunderstand the way the writer wants to deliver their message, which leads to issues at the professional and educational levels. Both asynchronous and synchronous communication have their unique benefits and challenges on a professional level and personal level. We can say that understanding the concept more gives us a



benefit in communication strategies, improving collaboration, and achieving goals more efficiently.

## **Online Professional Tools**

In today's digital era, the means of communication have become more important than ever before, especially post-pandemic. Being able to communicate effectively online is crucial for success in the profession. There are many tools available today, such as the use of Grammarly, which is a handy tool that helps improve the writer's writing at professional and educational levels. It checks for grammar mistakes and spelling errors, and sometimes it provides feedback about the writing style and suggests ways to phrase sentences better. Using Grammarly can also help when the writer is having a difficult time finding gaps within their work and needs ideas for improvement. With its new features, Grammarly can help resolve issues in a timely manner. Grammarly can be used when sending emails, drafting reports, proposals, and school assignments. Grammarly can be used as an external add-on to the writer's browser or accessed through the Grammarly web browser or application itself. Grammarly also offers cross-platform synchronization, so if the writer has a document on one device, it can be accessed on another device.

## ***Sharing Documents Online***

Software such as Microsoft Word and Google Docs is important for creating and sharing documents among coworkers and classmates. Microsoft Word, part of the Microsoft Office Suite, offers more advanced formatting options, offline access, and robust integration with other Microsoft products. It's particularly useful for professional documents and detailed reports. On the other hand, Google Docs, a cloud-based application part of Google Workspace, is better with real-time collaboration and cloud storage. Its user-friendly interface and seamless integration with other Google services make it ideal for projects that require frequent collaboration and access from various locations.

The use of digital tools has changed the way we work. The utilization of Microsoft Office and Chat AI (Copilot) has become increasingly common. Microsoft Office has a range of tools such as Excel, PowerPoint, and Outlook. These tools play a very important role in many professional works. These tools are important in managing emails and schedules, creating data analysis using Excel, and crafting engaging PowerPoint presentations for work-related meetings.

The newest integration of Copilot among professionals in recent years has been because of its ability to help professionals work efficiently and handle tasks that they may need assistance with. These digital tools contribute to creating clear communication and collaboration with professional environments, which creates enhanced productivity and effectiveness. The use of Grammarly, Microsoft Office, Google Docs, Zoom, and AI serves as a valuable asset in facilitating clear and streamlined online communication within professional settings.

## **Effective Online Collaboration**

Effective online collaboration is important for success in any virtual team. There are many strategies and tools to ensure effective collaboration and productivity in a professional setting. In online collaboration in a professional setting, we can talk about creating meetings that help managers work with coworkers by having regularly scheduled tasks and keeping everyone updated on the team's goals. The use of agenda preparation, which involves listing the topics planned for discussion before the meeting, helps in preparing everyone involved. Meeting tools, such as Zoom or Google Meet, are used to hold both virtual and in-person meetings.

Keeping up to date on assignments and deadlines in a professional online collaboration is important, especially in the use of task management tools like Asana to keep track of deadlines, work projects that are due, and keep track of team progress. These tools help us achieve maximized efficiency and an organized way of understanding what tasks need to be done to achieve our goals. The use of regular updates helps us monitor weekly progress and inform coworkers about the status of tasks on various projects that

they might be dealing with. Clear communication channels help us establish effective communication between our team and managers and coworkers for any help, such as the use of Slack or Microsoft Teams. These two platforms help make online collaboration smooth and reduce email clutter.

## ***Up to Date Contacts***

Managing email addresses and changes is important in online collaboration. Keeping a centralized contact list by maintaining an updated list of team members' email addresses and phone numbers is essential. Being up to date on all of the contact lists helps ensure having easy access to the team members' current information if any problems arise. It also reduces the delay of replies back, as everyone receives the email in the correct format, and they can respond promptly. Maintaining an updated contact list also helps with security measures as it will be able to protect your sensitive information from getting to unauthorized users, and only the current team can have access to it.

Using Google Contacts or the company directory can help you stay up to date with everyone's contact list and manage emails. When using any kind of account—be it a Google Account, Samsung Account, or an Apple Account—you have the choice to save all information to that one account. This allows the account to be updated in real time using multiple platforms and helps manage all of your information under one account. Using this option can help display the new information from the old information, as it automatically updates the old data to the new data, allowing for more accuracy. It also enables cross-platform sync, so you can access the data on different devices without any hassle.

## ***Management Tools***

The use of email management tools are important in order to maintain an organized and efficient inbox. There are many features that can be found within each inbox to help with that. These features include labels, folders, and filters that can help the writer become more categorized and prioritize their emails effectively. For example, the use of labels can help to tag emails by how urgent they are or which projects they

specifically go for, making it easier to find important messages later on faster. You can also add an automatic filter that sorts emails as they come into your email, this can help to reduce future clutter that may occur. There are also many inbox that include an archiving section where you can have a folder specifically for archived emails for future references. This not only helps the writer become more organized but also creates a more seamless collaboration between the writer and the team, especially when there are changes in team responsibilities or any important updates.

Tools such as Google Calendar can be updated in real time and allow for other team members to get involved by creating, accepting, or declining a meeting. This ensures that everyone is informed and all the information is aligned with one another. A shared calendar for mutual understanding of assignments is important in the use of online collaboration. Such as the use of calendar tools to share calendars with the team, schedule events, and setting reminders by using tools like Google Calendar and Outlook Calendar. Implementing a color-coding system to differentiate between different analyses like events, meeting deadlines, and personal tasks. Reminders and alerts are important to remind coworkers about deadlines of projects, emergency meetings, or any emergency-related things, so no one misses it. Accessibility is another key factor; the calendar should be shared with coworkers and the team to create collaboration. By implementing these strategies and utilizing the right ideas, online collaboration should help maximize team organization and meet deadlines consistently without any trouble.

## **Conflict Resolutions**

When dealing with a conflict online, most of the time having an in-person meeting tends to be a great way to resolve those issues, however, if the writers are communicating online and cannot meet up in person, they are limited to resolutions. Thankfully, there are a few ways to clear up any conflict online; it just takes time and patience.

When realizing a conflict is arising, the writers want to take a few steps back to acknowledge the issue at hand. This is because when you take steps back to assess the situation to the fullest, you can also assess the problem objectively. This allows you to

distance yourself from the emotional side of the issue. You can also find the specific core issue and problem at hand. Surface-level disagreements tend to happen when a conflict arises but being able to find the main cause of conflict can help reduce conflict time. Once the problem has been identified, the writer should be able to let every party that is involved understand the major conflict. Being able to communicate clearly and openly is important as everyone can be on neutral terms and have a shared understanding with one another.

### ***Clear Communication***

Restating the problem can also help in case of a misunderstanding, which happens plenty in an online space and could help clarify the issue (Robinson, 2020). Restating the problem not only helps clarify the issue at hand but also helps the conversation to stay on track and not steer away from the specific issue. It also helps prevent the conflict from evolving into a different unrelated argument that may make the situation harder to work with. The writer should also make sure that when responding to the other individual(s), they can take a step back and clear their head. Being able to clear one's head can help manage emotions such as anger and sadness, so that when they are writing their email, they can remain respectful and composed.

Being composed includes having clear communication and actively listening (if they are on a voice channel). The writer wants to make sure they have a clear understanding of what they are trying to say and be open to their thoughts; this also means asking follow-up questions. Follow-up questions may seem unnecessary, but being able to ask follow-up questions helps the other individual see that the writer is listening to what they are stating and also helps check for understanding. If the writer feels that any individual involved doesn't understand the full conflict or resolution, they can ask questions to help everyone understand the main points being made

### **Accessibility in Online Communication**

Ensuring that the communication we have in a digital world is accessible to everyone, whether the person has a disability or any other medical issue. There are many

ways to use accessibility in online communication. For example, adding descriptive text to images is important for individuals who use screen readers. Screen readers do not interpret images, so including descriptive text helps them understand and interpret the image by providing a clear and concise description. Accessibility formatting is another crucial aspect of online communication. Proper formatting ensures that the content is easily understood on a professional level. This includes using headings, structure, bullet points, and tables to simplify and organize information for both professional and personal purposes.

The use of color and contrast is also important when communicating online. When presenting a project, the choices made for colors and contrasts in content matter to the reader, particularly for those with visual impairments such as color blindness. Sometimes people or coworkers rely on color more than the delivery of the message but with the technology we have the writers use patterns or text to differentiate projects when color is getting involved. Multimedia is another accessibility we can use in online communication, such as the use of captions and transcripts for video and audio content, this will help the users who are disabled like deaf or hard at hearing things. By implementing these practices, the writers can make online communications composed of everyone and accessible for everyone. ensuring the message or presenting a project reaches everyone without any difficulty and is delivered effectively.

# Web Accessibility

## ***What is Web Accessibility?***

When a website or document is properly formatted, it should be easy for any person—regardless of physical or mental ability—to navigate. Web accessibility is not only ethical and inclusive, but it is also good for business. Web accessibility is defined by the World Wide Web Consortium (W3C) as, “[w]hen websites and web tools are properly designed and coded, [so] people with disabilities can use them”. Web accessibility allows a website or document to be available to a greater audience, as it makes it available to a wider set of potential users (UNC Greensboro).

This brief Web accessibility guide will be referenced to WCAG 2.1, as it provides the most up-to-date Web accessibility standards. For more information, please read the [WCAG 2.1](#).

## ***Why Does Web Accessibility Matter?***

People with disabilities want to be able to navigate websites and have access to information like their able-bodied counterparts. So much of life is dependent on the Web, whether it be communicating with friends and family, finding a job, education, and health care. It is paramount that all websites provide equal opportunities. Failing to comply with accessibility requirements could be deemed discrimination and leave businesses and corporations vulnerable to potential lawsuits.

## ***Who is Impacted?***

Inaccessible websites or documents can impact an individual's ability to interact with both the information and the organization. When users are limited in how they obtain information, it can create a frustrating and isolating experience.

Web accessibility benefits individuals with a variety of disabilities.

These disabilities include:

- Auditory
- Cognitive

- Neurological
- Physical
- Speech
- Visual (W3C).

Web accessibility also benefits those without any of the disabilities listed above. Older people with physical or mental limitations due to aging; people with “temporary” disabilities—such as a broken arm or lost glasses; those using devices with smaller screens; or those with slow internet connections may also benefit from Web accessibility.

## **Visual Impairments**

Vision is one of the most important senses. Without vision, the ways in which an individual moves through the world are severely impacted. There are around 2.2 billion people around the world with some sort of vision impairment (WHO). Vision impairments mean an individual’s eyesight cannot be repaired to “normal” levels (The University of Pittsburgh). Vision impairments can derive from a variety of sources, whether that be from health conditions such as cataracts, age, or diabetes (WHO).

### ***Fonts and Formatting for Low-Vision***

The user should be given the option to change the font style and size without losing any of the functions of the site. Increase the size of your text to 200% to test legibility.

### ***Color Contrast***

The WCAG requires a minimum contrast ratio of 4.5:1 for normal text and 3:1 for large-scale text. “The background colors of webpages, including highlighted text, might be perceived differently by users with visual impairments, and those with visual or cognitive disabilities might also have difficulty reading text at certain contrast levels” (Bureau of Internet Accessibility). Be careful when choosing color-pairs; The Bureau of Internet Accessibility provides the free Color Contrast Accessibility Validator for testing content against WCAG standards.



## ***Alternative Text***

Alternative text, or alt text, is a brief description of an image that can be read by screen readers. Screen readers are assistive technology that allows for a generated voice to read out words or image descriptions on a screen. Screen readers may also translate to Braille using a refreshable Braille device (see figure 1). If no alt text is provided, the user might be left without crucial information, or the screen reader will instead read out the image's file name. If the image is important enough to be included in the document, it should have an alt text descriptor.

Alt text is meant to provide further context for the user and should not just describe the contents of the image, but what the image's relevance is to the rest of the website or document. Remember to keep this between 1-2 sentences.



**Figure 9.1** *Person using a refreshable Braille device*

## **Learning Disabilities**

### ***Dyslexia***

There are an estimated 15% of people living with dyslexia in the United States (HHS). Dyslexia is classified as a learning disability, despite not impairing an individual's oral or reading skills. It does not affect an individual's intelligence in any way.

Dyslexia does not affect the vision of those who have it and is therefore not a vision impairment. Instead, those with dyslexia have difficulty relating letters and words to their appropriate speech sounds. This can make reading a much more difficult task. There is a misconception that those with dyslexia always see letters or numbers reversed or flipped, and while this could be the case at times, it is more likely that words will appear as if they are moving on the page.

### ***Font and Formatting for Dyslexia***

Font is crucial when designing a document that is considerate of those with dyslexia. While multiple dyslexia-friendly fonts exist, the degrees of success vary from individual to individual. It is best practice to choose a font that is clear and has a decent amount of kerning, or space between letters. Use a sans-serif font, such as Arial, Times New Roman, Verdana, or Helvetica. It is important to also limit the use of italics, underlining, and writing in all caps. Avoid large blocks of text when possible, and create paragraph breaks to add more space and improve readability.

Make the text fully left-aligned. Fully justifying text adds uneven amounts of spacing between words, making it harder to read for individuals with dyslexia.

## **Movement Disorders**

### ***An Introduction to Movement Disorders:***

A movement disorder can be defined as a condition in which an individual's voluntary or involuntary movement is inhibited by either an excess of movements, such as tremors and spasms, or a paucity (lack) of movement, presenting as sensations of weakness or stiffness (Fernandez, 3). There are several different diseases that can cause these symptoms, ranging from Writer's Cramp and Restless Leg Syndrome to Tourette's Syndrome and Parkinson's Disease (Martino, 10).

Among those with movement disorders, there is a large spectrum of the severity of expressed symptoms. For some, movement disorders have a negligible impact on their lives. For others, the condition might prove a significant barrier in the completion of daily activities, which often includes the consumption of media. However, there are several

strategies one might utilize to make their created media more accessible to those within this population.

## ***Understanding User Needs***

The specific needs of any given individual with movement disorders will of course vary depending on the type and intensity of their condition. There are, however, broad throughlines in which media made accessible to this population can be designed around. Foremost among them is a common preference for digital over print media. This is especially the case for those with particularly severe movement disorders. For these individuals there can be an increased tendency towards fatigue. This often leads to difficulty in handling physical documents (MedAim). It is therefore vital to focus accessibility concerns on digital media.

## ***An Introduction to Assistive Technology***

Those with movement disorders often rely on assistive technology to interact with digital media. This can include voice control software, sip-and-puff switches, head pointers, or specialized keyboards (MedAim). It is therefore necessary, when working to design content accessible to this population, to consider the capabilities of these technologies and their compatibility with the created media.



**Figure 9.2** An example of an individual (Mike Franz) using a sip-and-puff switch while in a wheelchair.

(<https://newmobility.com/the-quadstick-fps/>)

## ***Designing Document Layouts Accessible to Assistive Technology***

When considering assistive technology in the design of digital documents it is important to focus on creating content that is straightforward and uncomplicated. Complex organization in a document can often be difficult to navigate with assistive technologies (MedAim). Documents which are easily “scrollable” are often the ones which are the easiest to read for those who use assistive technologies. Therefore, a creator might consider organizing their document into a single column format with ample white space between lines. A logical, well-defined hierarchy of headings and subheadings can also be a great help. This kind of optimized structure allows readers to quickly locate specific information efficiently and eliminate the need for excessive and overly precise cursor control (WCAG 2.0).

## ***Designing Web Pages Accessible to Assistive Technology***

Webpages offer many potential barriers for those with movement disorders. However, they also provide numerous ways in which one might optimize accessibility for this population. Two of the most common assistive technologies utilized by those with movement disorders are specialized keyboards used without a mouse and touch screen interfaces. Therefore, web page authors should ensure all interactive elements—such as buttons and menus—are easily accessible by keyboard. For users that rely on touch screen interfaces, there should be clearly defined targets that can easily be selected by touch. Creators should also avoid adding elements which enforce timeouts on their website; users with movement disorders might be prone to periods of limited interaction with the web page due to fatigue (WCAG 2.0).

## ***Testing for Accessibility with Assistive Technologies***

The best way to ensure a document or web page is compatible with assistive technology is by testing its compatibility with said technology. There are a number of ways in which this can be done. The first is through manual testing. One can test the navigability of their content with the keyboards, touch screens, or screen reader programs that they have available to them. Another possible method is reaching out to those who frequently use assistive technology and asking them to trial the content before release. Alternatively, those who are technologically savvy and have a certain degree of coding skill might use one of the many free web development tools which will virtually test compatibility with a wide array of assistive devices.

## **Hearing Disorders:**

### ***An Introduction to Hearing Disorders***

360 million people worldwide suffer from some form of debilitating hearing loss (Martin). Hearing loss mostly affects access to media presented through audio. While the

scope of this style guide primarily focuses on written content, considerations must be made when video and audio media are included in created content. In cases where the content relies upon the inclusion of such media, ensure measures are taken to keep that media accessible to readers with hearing impairments.

## ***Making Audio Content Accessible***

The primary way audio content is made accessible to those with hearing loss is through captions and subtitles. Captions and subtitles are transcripts of the audio that is played in a video synced up to appear on the screen at the same time as when the given sound occurs. Using these measures, a person who is hearing impaired can enjoy a more complete access to the implemented media. When adding an important video to a piece of written content, an author should always try to ensure that there are captions and subtitles available with the video. In the modern era there are many videos that have automatically generated subtitles. Unfortunately, however, accuracy is a major concern when using these artificially generated subtitles.

A writer should consider creating their own transcript for videos lacking attached captions—or for audio-only clips. A transcript is a complete written record of all spoken content within an audio or video clip. Presenting a transcript next to a caption less video or audio clip ensures readers are getting the necessary information even if they cannot hear it straight from the source.

Transcribe spoken words verbatim when creating a transcript. Make sure to identify individual speakers. It can also be good to transcribe notable background noises, and non-spoken sounds like laughter, though this should be done sparsely (MHS).

## **Language Barriers**

### ***An Introduction to Language Barriers***

In an increasingly globalized and interconnected world, content that is shared across gaps of both borders and languages is becoming more common. This gives the incredible potential of having written content reach a vast, worldwide audience. However, without appropriate consideration, non-native speakers can have significant difficulties

parsing foreign media. If an author has any inclination of international distribution of their work, certain measures must be taken to ensure that non-native language speaking readers have an easier time comprehending the created content.

## ***Clarity and Concision***

On a fundamental level, the best way to ensure comprehension from a non-native speaker is through the employment of plain and simple language. There might be some reluctance to “dumb down” one’s writing. The intent is not to make less intelligent writing, but rather to create content that is clear, concise, and easily understandable. The cornerstone of plain language is clarity. Sentences should be written to be both direct and engaging. Authors should also try to use an active voice where possible, as this is often more legible to non-native speakers who are still learning the language. For example, instead of “The report was sent out by the manager”, one might instead write “The manager sent out a report”.

Complex sentences should also be broken down into shorter and more direct, individual chunks. These sentences should have clear subject-verb relationships. This reduction in complexity will make the writing a lot easier to follow for non-native speakers and make any potential translations considerably more straightforward.

## ***Vocabulary***

Avoid the use of jargon or specific cultural references and idioms which can often end up completely incomprehensible to non-native speakers. If the use of cultural references or technical terms are unavoidable, one should consider explaining its meaning within the text or within an added glossary.

## ***Translating Your Work***

One of the best ways to ensure that a work reaches an international audience is through the translation of the content. There are several factors to recognize when doing so. First, consideration must be made towards the possibility of machine translation. For an international audience, testing how the work appears after machine translation can be a good idea. Software like Google Translate can be used for testing purposes. If there is

any intention to translate one's own work, machine translation should be the last choice. Machine translation can be severely limiting and prone to error. Keeping writing simple will help with any potential machine translation, but a human translator is always the preferred option.

Be selective of the qualifications when seeking a human translator. Consider if a translator has experience with the language in question. Are they native speakers? How many years of experience do they have with the language? Additionally, one must determine a potential translator's experience working on professional projects. Have they ever worked on similar projects? How well do they understand your target audience? For larger and more substantial projects one might also give thought to the idea of working with a professional translation agency rather than hiring on an individual basis (ATA).

To ensure that a work is translated to the best possible extent, it is vital to maintain active and open communication with the translator. One must be sure to provide clear instructions and to answer any questions that come up.

## **Cross Platform Compatibility**

### ***An Introduction to Cross Platform Compatibility***

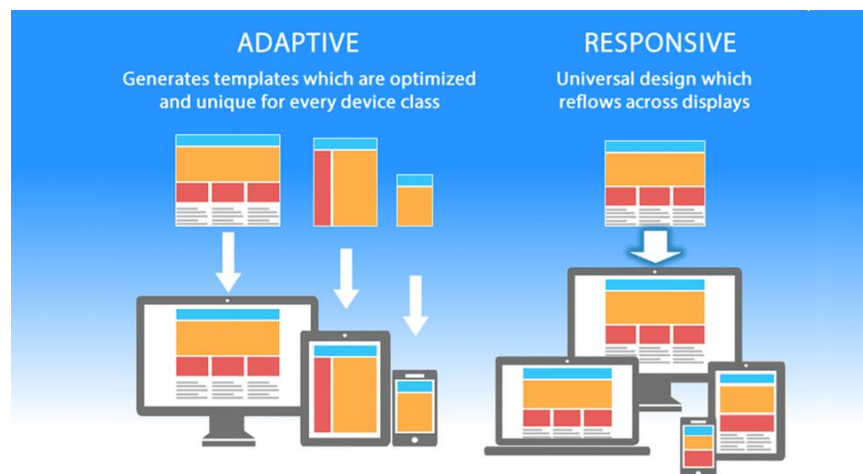
Compared to print media, working in a digital landscape presents several additional considerations. There are innumerable devices and programs on the market designed to view digital media. An author must be cognizant over the fact that all these platforms might not view the media in the same way. To reach as wide an audience as possible— and to ensure that the audience has a consistent viewing experience— measures must be taken in order to ensure that one's digital creations display well on all platforms. This is called cross-platform compatibility.

Everyone is likely to have, at some point, seen a website or program with poor cross-platform compatibility. The website might look well-made and cogent on a computer, but the website ends up looking jumbled and messy when viewed on a phone. A lot of cross-platform compatibility comes down to optimization on a programmer's side of things. However, there are several rules that a less tech savvy writer can follow to help ensure their digital creation has some degree of cross-platform compatibility.



## Writing for Responsive Design

If an author wants their work to reach a wider audience online, it is usually best to focus on creating written content on a website instead of a document. For authors without a lot of coding experience, utilizing third party website creation services such as *Wix*, *Weebly*, or *Squarespace* are often strong choices. Websites created by these services often—alongside other kinds of cross platform compatibility—have what is known as “responsive design.” Responsive design is when a website can adapt its resolution, font size, and formatting to different kinds of devices and screen sizes (Marcotte, 7). For example, any article on Wikipedia will look a lot different on the phone compared to a PC monitor. The article remains well formatted and imminently readable regardless.



**Figure 9.3** A diagram demonstrating how Responsive design works.  
 (<https://kinsta.com/blog/responsive-web-design/>)

Even in cases where website creation services do most of the work, there are still several things that an author must be conscientious of when planning their work. Users must first recognize that, on a smaller screen, paragraphs will appear longer and within a single scrolling column. It is good practice to keep paragraphs at a shorter length for better mobile viewing.

Due to the potentially longer length of the page an author must also consider how to make information more readily available for readers who are trying to retrieve information quickly from the page. Key information should be concentrated towards the

top of paragraphs and the page in general. Headings and subheading should also be used more strategically. There should be a heading about every 2 to 4 paragraphs. Authors should also avoid using too many levels of heading and subheadings as this can appear jumbled and confusing on smaller screens.

The fluctuating resolutions of used graphics is another aspect authors should be wary of. What might appear to be a large and clear graph on a computer screen can end up looking shrunken and unreadable on a mobile device. Authors should therefore avoid using graphs entirely in favor of things like bulleted lists. This also applies to any images with embedded text. Any images that are added should be formatted so they are not “floating” but instead so that text appears only before and after the image. On smaller screens next to the image might only appear in a one-word column due to space constraints (4Syllables).

## ***Testing Compatibility***

No matter how a web page is created, it is always a good idea to double check its cross-platform compatibility. One does not need to be a programmer to test this, in fact there are a few very easy ways to do it.

First, one can manually test their web page out on the devices and web browsers which are available to them. On each device one should visit the web page with every browser installed on that device– Chrome, Firefox, Safari, etc. In each instance the tester should systematically search for any discernible issues. They should look for any strange formatting errors, broken links, malfunctioning buttons, and so on. A creator can then eliminate any substantial compatibility errors before the content even reaches the wider online audience.

One of the most comprehensive tools to test compatibility is through online testing tools. These tools might seem a little bit intimidating at first, but most are actually rather user friendly and come with included tutorials on their usage. While there are more complex aspects to these services, simple general testing of a web page's compatibility is almost always straightforward to accomplish in practice. The only downside is that many of these services are only offered on a subscription-based service. Browserstack and LambdaTest are examples of services which offer limited testing for free account holders.

It is also always a good idea to give one's web page some real-world testing as well. For this, one should look towards friends and family. Ask them to view the website on their own devices and preferred browsers, then see if they spot any discrepancies or errors that the author might have missed.

## ***Addressing Common Issues***

Once potential issues within a webpage are identified, then it becomes time to fix them. Fortunately, most issues are perfectly straightforward to resolve.

Sometimes an image might be slow to load on a webpage or not show up at all. In such cases it can be helpful to look towards the properties of the image. One should check that the resolution of the image is not overly large. It can also be important to ensure that the format of the image is one that is compatible with most platforms such as a JPEG or a PNG format. Another potential issue could be fonts and emojis failing to show up on certain platforms. Authors should make sure to rely on commonly available fonts such as Arial or Times New Roman. Emojis should be avoided where possible.

In cases where the issue cannot be easily resolved, it is often best to look to other sources of help. If the web page is being hosted by a third-party service like Wix, calling their customer service department for troubleshooting can sometimes be a good idea. Relying on a developer or someone with relevant coding expertise can also be a good option.

## **Conclusion**

Writing is all about reaching out to one's audience. Focus is often placed on improving the impact and communicability of one's work. However, consideration of the actual logistics of an audience's accessibility to one's work is just as vital. This chapter has explored how factors such as disability, language barriers, or cross platform utilization might inhibit a reader's access to a work. Some examples of possible solutions to these barriers were offered. Recognizing the existence and nuances of these barriers is the first step in achieving a more accessible world.

# Professionalism/AI Usage/Citation

## Guidelines

These sections of the style guide will cover professionalism, AI usage, and citation guidelines. The intent of these sections is to inform UCF staff and students of the proper procedures for technical communication. These style guidelines will ensure uniformity and prevent anyone from misrepresenting the University of Central Florida.

### ***Professionalism Guidelines***

Professionalism is defined by Merriam-Webster as a set of standards that an individual is expected to adhere to in a workplace. These standards convey a sense of seriousness, a respectful attitude, and ensure uniformity across an organization. Having a professional tone in technical communication is extremely important for establishing the credibility of the speaker. This tone sets the foundation for how information is perceived and understood by the audience. Another important part of professionalism is the audience. Depending on the audience, different levels of professionalism may be required, and the communicator should be expected to adapt depending on the audience. Professionalism will be covered in this section of the style guide.

### ***Professional Tones***

One of the most important parts of communicating professionally is maintaining a sense of respect. Without a sense of respect, the communicator's credibility is greatly decreased, and some people may even potentially become offended. It is extremely important to always maintain a respectful and polite tone throughout communication, even in challenging situations where frustrations may arise. Communicators should avoid using slang or colloquialisms to maintain a sense of respect and professionalism. Slang can make the communicator appear uneducated or disrespectful. Avoid using things such as text speaking, shortcuts, and casual sayings. While these may be common with the younger generations, it can appear disrespectful to older generations and does not make

the writer appear professional. Overall, respect is a crucial foundation to communicating professionally.

Communicators should also respect the reader's time and intelligence by aiming to be as concise as possible and getting the required information across in the most efficient way. This helps ensure that the reader's time is respected and makes the document easier to understand. Communicators should avoid unnecessary words or overly complex sentences. This often makes the reading much more difficult and can confuse readers leading to misinterpretation of required information. Bullet points and headings should be used as needed to organize information and make it more digestible. Refer to the other sections for proper procedure on using headings and bullet points. Overall, the main goal of conciseness is to focus on delivering the essential information without digressing. Many people in the professional setting have to read thousands of emails and documents a day, which is why it is so important to get the information across as efficiently as possible. Being concise will make the communicator appear much more professional and increases the chance of them getting their information across in its entirety.

Similar to conciseness, clarity is another important aspect of professionalism. Using precise and unambiguous language ensures the message is clear and concise. When using a complex term, try to provide a definition in the text or the footnotes to avoid confusion. Communicators should avoid using jargon and technical terms unless the audience is specialized in the topic of discussion. Overly technical terms can confuse readers and it can make it more difficult to get the point across. The purpose of clarity is to ensure that your message is easily understood on the first read. Try to remain simple without oversimplifying to ensure that everyone can comprehend your message in an efficient manner.

Some examples of a professional tone:

- Ineffective communication:

“Hey Bro, can you change the project dates sometime later? The client wants something different again SMH. Peep the attached file for details”

- Effective Communication:

“The project timeline needs to be revised to accommodate the new client requirements. Please review the attached document for the updated schedule”

## ***Professional Audiences***

One of the most crucial parts of professionalism is identifying your audience and recognizing their needs. Understanding who is a part of your audience is essential for tailoring effective communication. Different audiences will have unique expectations, needs, and levels of understanding. This section will cover how to identify and respond to audiences while maintaining a professional appearance.

Understanding your audience is a very crucial part of effective communication. When communicating in a professional setting, it is always good practice to assume that you should communicate as professionally as possible. However, sometimes you may need to tailor your delivery depending on your audience. Analyzing your audience’s needs, expectations, and skill level should be one of the first steps any communicator takes. Usually, an audience’s skill level can be broken down into 3 separate categories.

Experts are individuals with a high level of knowledge on the subject. They are sometimes classified as Subject Matter Experts. When speaking with these types of audiences, the communicator can speak with technical language and provide in-depth explanations.

Example:

A detailed technical report on a new financial reporting software that includes Code architecture, implementation details, and specifications.

Non-Experts, as the name states, are individuals without in-depth knowledge on the subject. When speaking to these types of audiences, use simpler language and avoid jargon when possible. Always provide necessary background information such as definitions and process descriptions.

Example:

A user manual for the financial software that explains how to install, set up, and use the software in simple to understand terms

Mixed audiences contain both experts and non-experts. These are the most common audiences as they capture the broad range of skill levels that most organizations have. When communicating with these audiences it's good practice to balance technical details with clear explanations to ensure all members can comprehend.

Example:

A presentation on the new financial software that shows the benefits of the system and why the company is planning to use it. We should combine both high level overviews with technical details.

It is a safe practice to always assume that your audience doesn't have the same level of knowledge as you do. To remain professional, always try to give as much information as possible while also not over simplifying things. It can be hard to find a balance between the two, so it is better to have more information than to have someone unable to understand. Your tone can also change depending on the audience. Adjusting your tone ensures that your message is both appropriate and effective. Best practice is to always speak in a formal tone when unsure. This means using formal language with complete sentences and polite phrasing. This tone is better suited for business reports, academic papers, and official emails. An informal tone can also be used in more relaxed settings. This conversational style is better for internal communications among colleagues, quick

updates, and casual interactions. Knowing when to use both tones will make the communicator come across as more professional.

Example of formal tone in PowerPoint:

Slide Title: Market Trends Analysis:

AI-driven solutions are on the rise

Healthcare and finance industries show the highest demand

Strategic recommendations:

Increase AI research investment

Expand industry partnerships

Example of informal tone in PowerPoint:

Slide Title: Cool tech trends

AI-driven solutions are on the rise

AI is booming!

Healthcare and finance are loving it

What we should do:

Invest more in AI

Partner up with big players

Maintaining professionalism in both tone and audience interaction is crucial for effective communication. By understanding who the target audience is and adapting tone based on this, communicators can ensure that their messages are impactful, clear, and respectful. Having a professional tone helps foster a sense of trust and respect, both



of which enhance the overall effectiveness of communication efforts.

## **AI Usage Guidelines**

Artificial intelligence (AI) is a relatively new tool in the tech field that is revolutionizing the landscape of technical communication. It has been used to enhance productivity, accuracy, and consistency. These AI tools can assist writers in all the different stages of content creation from drafting all the way to final edits. These powerful tools can be dangerous when used in the wrong way, and this section is intended to guide communicators on proper usage. Understanding how to properly integrate these tools can significantly enhance both the efficiency and quality of your technical communication.

### ***Overview of AI tools***

AI tools utilize natural language processing (NLP) to both comprehend and generate human language. They can be used to analyze text for tone, grammar, style, and general readability. These tools can provide real-time feedback and can offer suggestions to improve the quality of writing. They leverage huge datasets and different machine learning algorithms to do all of their functions. Some examples of different AI Tools include Grammarly, Chat GPT, ProWritingAid, and Hemingway Editor.

There are multiple benefits communicators gain from using AI tools. One of the largest benefits is how much they can enhance productivity. The tools can automate repetitive tasks such as editing and grammar checks. They can also be used to generate content ideas, outlines, and even full paragraphs, all to help work around writer's block. The enhancement in productivity frees up time for more critical aspects of writing. Another benefit of AI tools is the improvements to both accuracy and consistency. AI can identify grammatical errors, typos, inconsistencies, and even correct them. This ensures a polished final document and makes the document appear professional. AI assistants can also be used to maintain a consistent tone and style throughout the document. Yet another benefit of AI writing tools are language and style suggestions

they can provide. Communicators can utilize these tools to make readability enhancements and tone adjustments. They can also highlight complex sentences and provide suggestions such as how to align text with the intended audience or how to improve readability.

## **Ethical Considerations and Restrictions**

While these AI tools can offer significant benefits, there are also major ethical considerations and restrictions communicators need to be aware of and consider before using these tools. Communicators need to balance the convenience AI provides with a strong ethical responsibility to ensure integrity and originality in their work. UCF has very strict policies regarding plagiarism and academic integrity which is why this section is crucial.

Relying too heavily on AI generated content can lead to various plagiarism concerns. Communicators need to treat AI as a supplemental tool and not a replacement for original writing. When AI is used to generate substantial portions of text, it is important to acknowledge their contributions. Communicators may be found in violation of UCF's plagiarism policy if they rely too heavily on AI generated content.

Another danger of AI tools is the high probability of bias. These tools are trained on large datasets which are almost guaranteed to contain a bias. It's impossible to completely escape from this bias as these tools are only as good as the information they are taught. Communicators need to critically evaluate every suggestion generated by an AI tool to avoid perpetuating stereotypes and biased language. Always ensure that the language used is inclusive and respectful and adjust as needed to meet all the standards.

Any content that is generated by AI needs heavily reviewed to ensure accuracy, appropriateness, and relevance for intended audiences AI tools are imperfect and incapable of fully understanding nuance or context; therefore, human judgment should always make the final decision.

## ***AI-Assisted Writing Examples***

AI-Generated Summaries:

Original Text: "The new software update includes several performance enhancements and bug fixes. Users will notice improved speed and stability, particularly when running complex tasks. The update also introduces new features that enhance user experience."

AI-Generated Summary: "The software update improves performance, speed, and stability, and adds new user-friendly features."

Content Expansion:

Input: "Benefits of the new software."

AI-Generated Expansion: "The new software offers several benefits, including faster processing speeds, enhanced security features, and an intuitive user interface. These improvements contribute to increased productivity and a better overall user experience."

## ***Formalized Best Practices***

In order to maximize all the benefits AI tools can provide while also maintaining professional standards, refer to this subsection as a formal guideline.

AI Integration into the writing process

- AI can be used to generate initial drafts or outlines which need to be further refined and expanded upon.
- AI can be utilized for both grammar and style checks during the editing phases.

Reviewing and Editing Content

- Always assess all AI generated content critically. Make every necessary adjustment to align the message with the intended audience and tone.
- Refine all AI suggestions to ensure seamless integration within the overall document structure and context.

#### Professional Standards

- AI can be used to ensure consistency in terminology, tone, and style throughout the document.
- Always conduct a thorough final review to ensure all content is accurate, relevant, and appropriately tailored to the audience.

#### UCF considerations

- UCF has the final say in every and all plagiarism cases. Always double check with professors and advisors about appropriate AI usage on a case-by-case basis.

The integration of AI tools has substantial benefits, such as increased productivity, better accuracy, and improved consistency. With great power comes great responsibility and it is crucial to always use these tools ethically and with human oversight to ensure originality and avoid both bias and plagiarism. By following all the best practices and critically evaluating all content generated by an AI tool, communicators can leverage AI to produce professional high-quality documentation that effectively communicates their message.

## Citation Guidelines

Proper citation is a crucial part of technical communication. As stated earlier, UCF has extremely strict rules regarding plagiarism. Citation ensures that all original authors receive credit for their work and that readers can locate and validate all sources of information. It also increases the validity of your writing and helps avoid plagiarism. This section will cover the importance of correct citation and provide citation guidelines.

## **Importance of Correct Citation**

### ***Prevention of Plagiarism***

Plagiarism has serious consequences both academically and professionally. UCF is notorious for having strict rules regarding plagiarism. Expulsion from the university is one the many consequences of plagiarism. Proper citation ensures that the intellectual property of others receives credit and respect. It also maintains the integrity of your work, showing that you did research.

Direct quotes, paraphrases, and summaries of others' ideas must be cited to distinguish between the intellectual property of others and your own original work.

### ***Giving Credit Where Credit is Due***

Citations ensure that all the various contributions of other researchers and writers get acknowledged. It also provides both intellectual and historical context for your own work.

Proper citation demonstrates the engagement of academic researchers and can enhance scholarly discourse.

### ***Professional Credibility***

Ensuring the usage and citation of reputable sources adds both credibility and authority to your work. It shows that your arguments are well-founded and are backed by established research.

Readers are more likely to value and trust your work when it shows you've done proper research and have correct citations.

## UCF Citation Styles

Several citation styles are commonly used in academic and professional writing. Each has specific rules for formatting citations and references. The choice of style often depends on the discipline or the preferences of the institution or publisher. UCF's library listed these three styles on their website.

### ***APA Style (American Psychological Association)***

Used In Social sciences, education, psychology

Key Features:

- In-text citations include the author's last name and the year of publication.
- A reference list at the end of the document includes full citations with author names, publication year, title, and source details.

### ***MLA Style (Modern Language Association)***

Used In Humanities, literature, arts

Key Features:

- In-text citations include the author's last name and page number.
- A "Works Cited" page at the end of the document includes detailed citations with author names, title, publication information, and page numbers.

## ***Chicago Style (Chicago Manual of Style)***

Used In History, business, fine arts

Key Features:

- Two systems: Notes and Bibliography (footnotes or endnotes) and Author-Date (in-text citations).
- Detailed bibliographic entries for all sources, including books, articles, and online resources.

This link can be used for more information regarding UCFs citation guidelines:  
<https://guides.ucf.edu/rosen/citation-help>

## ***Proper Citations Examples***

Proper citations vary based on the style used. Refer to this section for examples of the styles used by University of Central Florida:

### **APA Style**

**Book:** Smith, J. (2020). *Understanding AI*. Tech Publications.

**Journal Article:** Doe, J. (2019). The impact of AI on society. *Journal of AI Research*, 14(3), 123-145.

### ***APA In-Text Citations***

**Format:** (Author, Year)

Example:

(Smith, 2020)

**Direct Quote:** (Author, Year, p. Page Number)

Example:

(Smith, 2020, p. 45)

## ***APA Reference List***

**Format:** Author(s). (Year). Title of the work. Source.

Example:

Smith, J. (2020). *Understanding AI*. Tech Publications.

## **MLA Style**

**Book:** Smith, John. *Understanding AI*. Tech Publications, 2020.

**Journal Article:** Doe, Jane. "The Impact of AI on Society." *Journal of AI Research*, vol. 14, no. 3, 2019, pp. 123-145.

## ***MLA In-Text Citations***

**Format:** (Author Page Number)

Example:

(Smith 45)

**Direct Quote:** Include the author's last name and the page number without a comma.

Example:

(Smith 45)



## ***MLA Works Cited***

**Format:** Author(s). Title of the Work. Source, Publication Year.

Example:

Smith, John. *Understanding AI*. Tech Publications, 2020.

## **Chicago Style**

**Book:** Smith, John. *Understanding AI*. New York: Tech Publications, 2020.

**Journal Article:** Doe, Jane. "The Impact of AI on Society." *Journal of AI Research* 14, no. 3 (2019): 123-145.

## ***Chicago In-Text Citations***

**Notes and Bibliography:** Superscript numbers in the text that correspond to footnotes or endnotes.

Example:

According to Smith, <sup>^1</sup>

**Author-Date:** (Author Year, Page Number)

Example:

(Smith 2020, 45)

## ***Chicago Bibliography***

**Format:** Author(s). Title of the Work. Place of Publication: Publisher, Year.

Example:

Smith, John. *Understanding AI*. New York: Tech Publications, 2020.

Proper citation is crucial for maintaining the integrity and credibility of technical communication. By understanding and applying the appropriate citation style, you can give proper credit to the original authors, avoid plagiarism, and enhance the quality of your writing. Always review your citations for consistency and adherence to the required style guidelines.

# Presentation Skills

In the technical field, the ability to communicate complex concepts clearly and effectively is key. Whether presenting a new software solution, discussing complex data analytics, or pitching a tech business, strong presentation skills can have an immense effect on a technical communicator's profession. The 5Ps of presentation skills—planning, preparation, practice, performance, and post-event analysis—are the primary elements for defining effective communication skills for technical professions. Other essential elements include nonverbal communication, engaging the audience, active listening, body language, audience analysis, editing your presentation, presentation structure, employing visual aids, overcoming nervousness, vocal techniques, and voice modulation.

## ***The 5Ps of Presentation Skills***

The cornerstones of successful presentation delivery are the 5Ps of presenting skills: planning, preparation, practice, performance, and post-event analysis. Each component is crucial to any presentation's clarity, engagement, and effectiveness.

### ***Planning***

The first step to a successful presentation is to plan accordingly. It involves deciding on the aim of the presentation, determining the primary points to convey, and recognizing the audience's needs and interests. For professional presentations, this includes thinking about the level of depth and complexity that is appropriate for the audience. Setting goals for your presentation, such as informing, persuading, or entertaining, is also part of the planning process.

### ***Preparation***

Preparation involves developing the material of the presentation and organizing it in a manner that is coherent and logical. This includes generating visual aids like slides, charts, and infographics to supplement your verbal content. It is important that you verify that any technical presentation information is correct and current. Rehearsing the speech

is another part of preparation, as it ensures one is familiar with the topic and comfortable with the presentation's flow.

## ***Practice***

To boost confidence and guarantee an effortless delivery, practice is crucial. To do this, you must practice your presentation several times in front of a practice audience as well as by yourself. Practicing allows one to find areas for development while simultaneously getting more familiar with the material. Additionally, it provides a chance to improve the body language, intonation, and timing of your delivery.

## ***Performance***

Performance is defined as how your presentation is delivered. To maintain the audience's interest and involvement, it is necessary to provide the use of effective body language, vocalization methods, and audience engagement strategies. Technical presentations need to be concise and precise; jargon and overly complicated explanations should be avoided. During the performance, you should come prepared to answer questions and handle any technical difficulties that might emerge.

Post-event analysis consists of reflecting on the impact of your presentation and seeking feedback from the audience. It allows one to identify areas for improvement and make alterations for future presentations. Additionally, one can use this time to evaluate the progress towards the objectives and to plan any necessary follow-up steps.

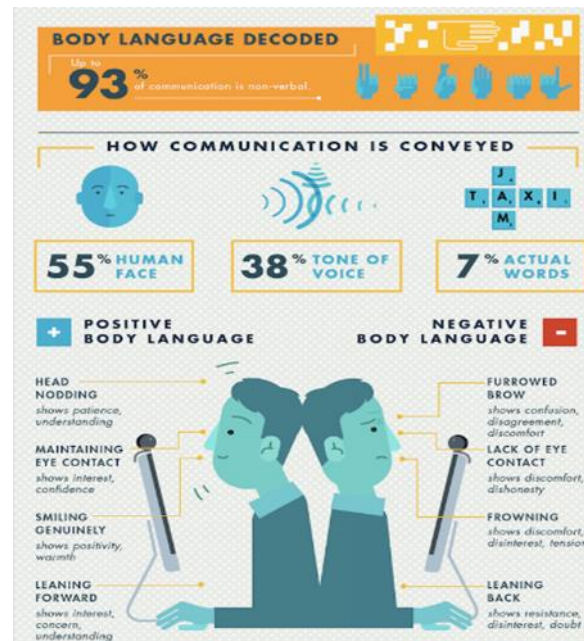
## ***Post-Event Analysis***

Post-event analysis consists of reflecting on the impact of your presentation and seeking feedback from the audience. It allows one to identify areas for improvement and make alterations for future presentations. Additionally, one can use this time to evaluate the progress towards the objectives and to plan any necessary follow-up steps.

## ***Body Language***

During presentations, body language is important for showing confidence and dedication. Effective body language can assist in maintaining audience engagement and communicate interest for the subject matter in technical subjects, where content is frequently lengthy and complex. Maintaining eye contact is important because it develops interaction with the audience and demonstrates confidence. To emphasize important

ideas and add energy to the presentation, deliberate gesturing is helpful. In addition, a powerful posture, which includes standing straight and not fidgeting, can express confidence and keep the audience's attention on the material (Anonymous 2021).



**Figure 11.1** Body Language within the work environment.

## Audience Engagement

Presenting successfully involves engagement with the audience. Questions, surveys, and interactive demonstrations are all great ways to engage the audience. This ensures that the audience is actively absorbing and remembering the material, in addition to adding energy to the presentation. Another approach is to connect the knowledge to real-world applications that are applicable to the audience's interests or professional expertise. By making the information relatable, presenters can grab the audience's attention and make complex technical subjects more approachable (Worsfold, 2019).

## Active Listening

Presenters need to be adept at active listening, especially in technical topics where audience members could have questions or concerns. Asking clarifying questions, giving meaningful answers, and acknowledging the opinions of the audience are all examples of active listening. This allows the presenter to clear up any misunderstandings and offer more details as needed, while also demonstrating respect for the audience's viewpoint (Greenlaw, 2012). Active listening establishes a two-way communication channel, which can improve the entire presentation's efficacy.



Figure 11.2 Tips on Actively Listening.

## Storytelling

One of the most effective ways to help audiences understand and retain technical material is through storytelling. Presenters can explain difficult ideas and show how they are applicable in real-world situations by incorporating technical expertise into a story framework. For example, in introducing the creation of a new cybersecurity procedure, a presenter could begin by recounting a recent data breach that impacted a large company. They might then explain how their novel approach was used to detect and prevent comparable dangers, demonstrating its usefulness with specific examples and outcomes. Using this method helps the audience to comprehend the practical application and value of the technical solution, while also making the content more approachable and

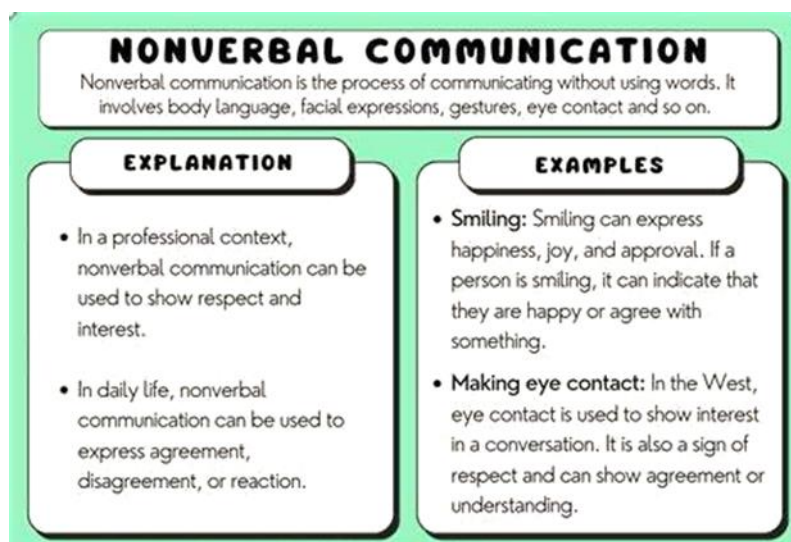
interesting (Worsfold, 2019). Storytelling brings technical subjects to life, allowing listeners to engage emotionally and intellectually with the information provided.

## ***Handling Questions***

For technical presentations, it is important to effectively respond to questions. Questions might offer significant perspectives into the comprehension and apprehensions of the listeners. When answering questions, it is necessary to pay close attention, give concise, understandable responses, and, if required, acknowledge when you do not know the answer. You can also show that you are committed to providing accurate and beneficial responses by offering to follow up with more information.

## ***Nonverbal Communication***

The effectiveness of a presentation can be greatly impacted by nonverbal cues such as body language, gestures, and facial expressions. Nonverbal cues that are positive, like smiling and nodding, may spark enthusiasm and confidence from the audience, while those that are negative, like crossing arms or averting eye contact, might put the presenter and audience at a disadvantage (Anonymous, 2021). The overall influence of the presentation can be improved by being conscious of and purposefully using nonverbal communication.



**Figure 11.3** Explanation and Examples of Nonverbal Communication.

## ***Providing Technical Insights***

Giving precise and comprehensible technical insights is important while giving technical presentations. This means breaking difficult concepts down into small chunks and utilizing analogies or examples to highlight crucial aspects. When presenting technical material, it is needed to divide complex issues into smaller, more consumable chunks (Greenlaw, 2012). For example, if you're discussing a machine learning algorithm, begin with a high-level summary of what it is and why it's useful. Then, gradually delve into the algorithm's complexities, such as how it analyzes data, the importance of certain parameters, and its potential applications. Analogies and real-world examples can help abstract concepts feel more relatable. When presenting blockchain technology, you could relate it to a digital ledger that numerous parties can view and verify at the same time, like a shared Google Doc that records each modification made by users. This example clarifies technical jargon while giving a visual representation of how blockchain works.

## ***Audience Analysis***

A detailed awareness of the audience's background, technical skills, and unique interests is required when adapting a presentation for them. For example, if presenting to a group of software developers, understanding their knowledge of coding languages and industry trends allows presenters to modify the level of technical detail accordingly. Similarly, for a mixed audience that includes managers and engineers, mixing high-level insights with technical details ensures that all participants are relevant and engaged. Planning forward and being proactive in answering possible queries or worries shows trustworthiness (Worsfold, 2019). Examples of such concerns include handling scalability issues in cloud computing solutions or regulatory challenges in data privacy. Presenters may create a more memorable and engaging presentation experience by customizing information to fit the requirements and expectations of their audience.



## Audience Analysis

<b>Analyze</b>	Who is/are the recipient(s)?
<b>Understand</b>	What is their knowledge of your message?
<b>Demographics</b>	What is their age, gender, education level, position?
<b>Interest</b>	What are their interests or investment to your message?
<b>Environment</b>	What is your relationship to the audience? What is their likely attitude to your message? Have you taken cultural differences into consideration?
<b>Needs</b>	What information does your audience need?
<b>Customize</b>	How do you adjust your message to your audience?
<b>Expectations</b>	What is your audience's expectations?

**Figure 11.4** A breakdown of Audience Analysis using questions.

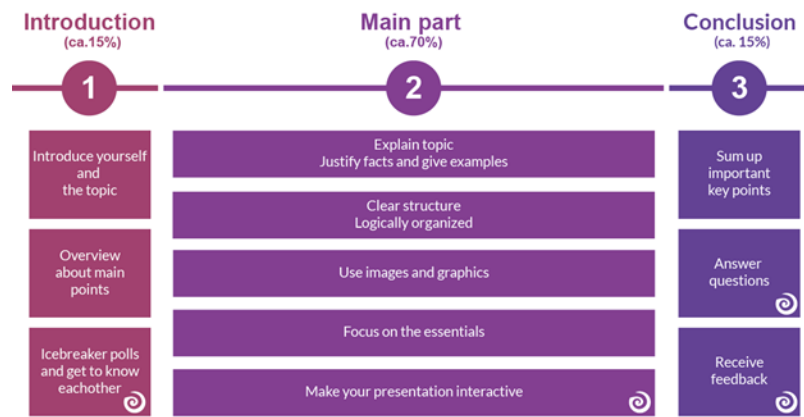
## ***Editing Your Presentation***

Maintaining the audience's interest during a presentation requires meticulous editing for clarity and succinctness. This includes going over the content to eliminate extraneous elements, simplifying challenging information, and ensuring a logical flow. When describing a new software feature, for instance, concentrate on its main features and advantages rather than going into detail on every technical detail. Use graphs and charts as visual aids rather than lengthy lists of figures to help make difficult material easier to understand (Greenlaw, 2012). It may be easier to spot areas that need modification, like excessive technical jargon or parts that break the flow, by practicing the presentation several times. Rewrite a slide to make the material clearer, if you find that it confuses the audience you practice with. An audience will find it easier to understand and remember the information you are providing if your presentation is well-edited and holds their attention while effectively communicating the intended message.

## **Presentation Structure**

For the audience to be guided through the content in a logical and clear way, a presentation that is well-structured is essential. This normally consists of an introduction outlining the main ideas, a body of information that dives into the specifics, and a conclusion summarizing the most important lessons learned. Maintaining the audience's

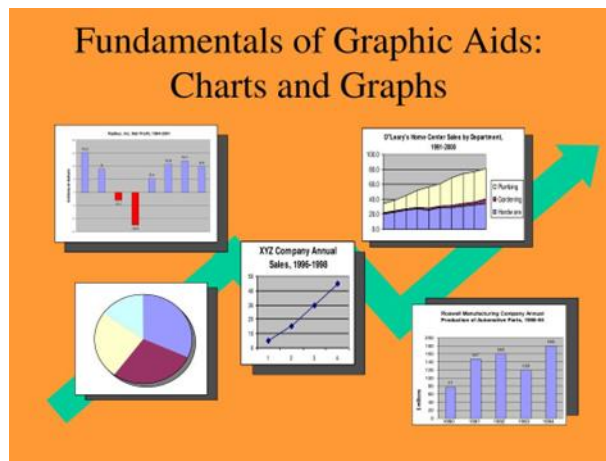
attention and ensuring the presentation moves smoothly can both be accomplished by using clear transitions between sections (Worsfold, 2019).



**Figure 11.5:** A breakdown on how a presentation should be structured.

## *Use Visual Aids*

Slides, charts, and diagrams are examples of visual aids that can greatly improve a technical presentation's effectiveness. These resources aid in clarifying difficult ideas, emphasizing important ideas, and maintaining audience interest. For example, a flowchart can help the audience follow along more easily when explaining a difficult method by visually representing each step. Likewise, concepts that would take a long time to express verbally can be directly conveyed by using graphs to illustrate data trends. However, visual aids should be used sparingly and in moderation to complement rather than distract from verbal material. Overloading slides with words or employing overly complicated images might overwhelm the audience and distract you from your point (Rubenson, 2021). Instead, choose high-quality pictures that are clear, simple to understand, and directly connected to your points. When comparing different datasets, for example, a straightforward bar chart with clear labels might be far more useful than a long table of figures. You can improve audience retention and understanding by carefully choosing and developing visual aids, resulting in a more impactful and memorable technical presentation.



**Figure 11.6:** Ways to use Graphic Aids in a presentation.

## ***Overcoming Nervousness***

For many speakers, getting over their fear is a common challenge, especially in technical disciplines where the stakes are high, and the subject is complex. One effective method is intensive rehearsal; practicing the presentation several times can boost confidence and lessen nervousness. Speaking from experience frees speakers from the anxiety of forgetting important details or pronouncing phrases incorrectly, allowing them to concentrate more on making compelling presentations. Furthermore, anxiety can be reduced by shifting attention from one's own performance to the content itself. Prior to and during the presentation, techniques like deep breathing and visualization may help reduce anxiety by encouraging calmness and mental clarity (Rubenson, 2021). When a software developer is ready to introduce a new coding framework to a conference audience, for instance, they can rehearse regularly, act out possible Q&A situations, and picture giving a polished presentation. To ensure a more professional and composed performance on the day of the presentation, preparation is just as important as it boosts confidence.

## ***Vocal Techniques***

Maintaining a presentation's clarity, interest, and audience comprehension requires the use of effective vocal methods. One way to improve the communication of technical content is by using different intonations. Consider explaining the evolution of machine learning algorithms. By controlling your voice to emphasize historical milestones—such as the development of neural network algorithms in the 1950s, machine learning breakthroughs in the 2010s, and recent advances in speech processing—you not only highlight key points but also keep the audience interested. Speaking at the right volume also guarantees strain-free hearing for all listeners, and speaking at a steady tempo facilitates the assimilation of complicated material without overloading the audience (Anonymous, 2021). To ensure that their message is effectively received by the audience, presenters can enhance their delivery by practicing these vocal techniques beforehand.

### **Voice Modulation**

In technical presentations, where dense subjects can quickly become boring or overpowering, voice modulation is an important ability. Presenters may successfully highlight important ideas and keep the audience interested by deliberately adjusting pitch, tone, and tempo. When describing a novel AI algorithm, for instance, a presenter may first lower their pitch to emphasize technical details and communicate seriousness, then increase it with excitement to highlight breakthroughs or real-world applications. Tailoring one's tone can include nuances; for example, employing a comforting tone while addressing possible worries or a confident tone when delivering definitive findings. Meanwhile, altering the pace aids in the clarification of complicated ideas, slowing down for complicated information and speeding up for summaries or transitions (Anonymous, 2021).

Practicing these modulation techniques ensures that the presentation not only informs but also captivates the audience, making technical information more accessible and compelling.

# Audience Analysis

In technical communication, understanding your audience is essential. This understanding is achieved through a process known as audience analysis. Audience analysis involves gathering and interpreting information about the recipients of your communication. The primary goal is to understand the needs, expectations, background, and interests of your audience to create a message that resonates with them (N.A., 2024).

The importance of audience analysis in effective communication is vital. It allows us, as communicators, to cultivate our message to the audience, thereby increasing the chance of effective communication. By understanding the audience's needs and expectations, we can craft a message that is both engaging and persuasive. Furthermore, audience analysis can help identify potential barriers to communication and devise strategies to overcome them (Learning, 2024).

This chapter provides an in-depth exploration of audience analysis. It will delve into the various methods of conducting audience analysis, the types of information to gather, and how to use this information to enhance communication. It will also discuss the role of audience analysis in the creation of our style guide, and how it can guide us in making decisions about content, language, style, and design.

By the end of this chapter, will have a solid understanding of audience analysis and its significance in collaborative endeavors. This knowledge will not only the role of audience analysis in the creation of the style guide will be discussed, highlighting its importance in making decisions about content, language, style, and design. By the end of this chapter, a solid understanding of audience analysis and its significance in collaborative endeavors will be achieved. This knowledge will contribute to the success of the current project and prove invaluable in future professional endeavors as students at UCF, technical communicators, and beyond. This chapter serves as a guide to understanding the audience and effectively communicating messages in a way that is both engaging and informative. It is a crucial component of the style guide and an essential tool for any technical communicator (Schwertly, 2024).

# Understanding Your Audience

Knowing your audience is a fundamental aspect of effective communication. It allows you to tailor your message to the specific needs, expectations, and interests of your audience, thereby increasing the probability of your message being received and understood.



**Figure 12.1** 7 Steps of Audience Analysis

One of the first steps in understanding your audience is to consider their demographic factors. These are accessible characteristics of a given population, such as age, education level, income, occupation, gender, ethnicity, and geographic location. These factors can provide valuable insights into your audience's background,

experiences, and perspectives, helping you to craft a message that is relevant and relatable to them.

In addition to demographic factors, it's also important to consider psychographic factors. These are more subjective characteristics related to your audience's interests, attitudes, values, and lifestyle. Understanding these factors can help you to connect with your audience on a deeper level, engaging their emotions and motivations to enhance the impact of your message.

In the following sections, we will delve deeper into these concepts and explore various techniques for audience analysis. We will also discuss how to use this information to create audience-centered communication and provide a detailed case study showing audience analysis in action. By the end of this chapter, you will have a solid understanding of how to analyze your audience and use this knowledge to enhance your communication. Whether you're a student at UCF, a technical communicator, or simply someone looking to improve your communication skills, this chapter will provide you with valuable insights and practical tools to help you succeed (Learning, 2024).

## ***Audience-Centered Communication***

In technical communication, it's essential to center your message around the audience. This involves understanding their needs, and expectations, and how best to engage them.

## ***Modifying Your Message***

Effective communication begins with tailoring your message to your audience. This involves careful consideration of the language and terminology you use.



**Figure 12.2** Image of Briar Goldberg

As Briar Goldberg, the director of speaker coaching at TED, advises, "Most people communicate in the wrong direction. Too many of us write our scripts, build our decks, or compile our talking points before we think about our audience and what they need or expect to get out of our communication" (Goldberg, 2021). It's crucial to use a language that your audience is familiar with. Avoid jargon and technical terms unless you are sure your audience understands them. If you must use specialized terms, be sure to define them clearly.

Additionally, using examples and analogies that are relevant to your audience's experiences and knowledge can help make complex ideas more understandable and relatable (N.A., 2024).

## **Considering Audience Needs and Expectations**

Understanding your audience's needs and expectations is key to crafting a message that resonates with them. This includes their information needs (what they need to know), emotional needs (how they might feel about the information), and practical needs (how they will use the information) (Learning, 2024). By contemplating these elements, you can ensure your message is both useful and meaningful to your audience.



## ***Engaging Your Audience***

Finally, engaging your audience is crucial in maintaining their interest and ensuring your message is received. This can be achieved through the use of interactive elements (such as questions or activities), visual aids (like diagrams or infographics), and storytelling techniques (such as narratives or anecdotes). These elements can make your message more engaging and memorable, helping to ensure your audience understands and retains the information you're communicating.



**Figure 12.3** Image of a speaker engaging with his audience

Understanding your audience is crucial in technical communication. There are several techniques you can use to analyze your audience, each with its own strengths and weaknesses (Schwertly, 2024).

## **Techniques for Audience Analysis**

### ***Surveys***

Surveys are a common method for gathering information about your audience. They can be distributed widely and can collect data from a large number of people.

However, they may not provide the depth of information that other methods can provide. When designing effective surveys, consider the following:

When designing effective surveys, consider the following:

- Keep it short and simple.
- Use clear and concise language.
- Include a mix of question types (multiple choice, rating scale, open-ended) (N.A, 2024).

The image shows a digital survey form with a blue background. At the top, it says 'AUDIENCE ANALYSIS' in small white letters, followed by 'SURVEY FORM' in large white letters. Below this is a small line of text: 'Come on! Fill out the following survey form to get special prices and the opportunity to work with us!'. There are four input fields: 'NAME:', 'EMAIL:', 'AGE:', and 'CONTACT:'. Below these are four question boxes, each with a placeholder text 'Question 1: Type here your question. Which is your question?' and three lines for text entry.

**Figure 12.4** Image of a survey form

## ***Interviews***

Interviews allow for a deeper understanding of your audience. They can provide detailed insights into your audience's thoughts, feelings, and experiences. However, they can be time-consuming and require a certain level of skill to conduct effectively.

When conducting interviews and analyzing interview data, consider the following:

- Prepare your questions in advance.
- Be respectful and attentive.

- Record the interview for accurate data analysis.

## ***Observation***

Observation involves watching your audience in their natural setting. This can provide valuable insights into their behavior and preferences. However, observer bias can influence the results.

When conducting observations, consider the following:

- Be as unassuming as possible.
- Take detailed notes (N.A, 2024).
- Use strategies to reduce observer bias, such as multiple observers or video recording.

## ***Secondary Research***

Secondary research involves utilizing existing data, such as reports, studies, or online content. This can be a cost-effective way to gather information. However, the data may not be exactly what you need, and the source may not be reliable.

When conducting secondary research, consider the following:

- Use reputable sources (N.A, 2024).
- Check the date of the information to ensure it's current.
- Compare multiple sources to verify information.

By using these techniques, you can gain a deeper understanding of your audience, allowing you to tailor your communication more effectively. Remember, the key to successful audience analysis is to use a combination of methods and to be flexible and adaptable in your approach.

## **Audience Analysis in Action**

Audience analysis is not just a theoretical concept; it's a practical tool that's used in various fields. Let's look at some case studies where audience analysis plays a crucial role.

### ***Marketing Campaigns***

In marketing, understanding your target market is the first step in creating an effective campaign. This involves analyzing demographic data, consumer behavior, and market trends. Once you understand your audience, you can tailor your advertising messages to resonate with them. For example, a company selling eco-friendly products might target environmentally conscious consumers and tailor their messages to emphasize the environmental benefits of their products (Schwertly, 2024).

### ***Technical Documentation***

Technical documentation, such as user manuals or help guides, requires a deep understanding of the user's needs. This involves identifying the tasks users need to perform, the problems they might encounter, and the level of technical expertise they have. The content is then adapted for different user groups. For instance, a software company might create different user guides for end-users, system administrators, and developers, each tailored to the specific needs and skills of those users.

### ***Public Speaking***

In public speaking, analyzing audience demographics such as age, education level, and cultural background can help tailor the speech content and delivery. For example, a motivational speaker addressing a group of high school students would likely use a different tone, language, and examples than if they were speaking to a group of business executives (Goldberg, 2021).

These case studies illustrate how audience analysis can be applied in real-world situations to improve communication effectiveness (Learning, 2024). By understanding your audience, you can tailor your message to their needs and expectations, resulting in more effective and successful communication.

## Common Mistakes in Audience Analysis

Audience analysis is a critical part of technical communication, but there are common mistakes that can hinder its effectiveness. Here are some to watch out for

### Making Assumptions

### *Avoiding Stereotypes*

It's easy to make assumptions about your audience based on stereotypes. However, these can often be misleading and inaccurate. Always strive to see your audience as individuals with unique experiences and perspectives.



**Figure 12.5** Why Stereotypes are harmful poster

Strategies on how to avoid stereotypes.

- Validating Assumptions with Data.

- If you do make assumptions, ensure they are validated with data. Use your audience analysis techniques to gather evidence that supports your assumptions.

## **Ignoring Audience Needs**

### ***Importance of Empathy***

Ignoring the needs of your audience can lead to ineffective communication. Empathy is key in understanding these needs. Put yourself in your audience's shoes and consider their perspective.

### ***Continuous Feedback Loops***

Don't assume that once you've conducted your audience analysis, your job is done. Audience needs can change over time, so it's important to establish continuous feedback loops to stay updated. (Schwertly, 2024).

### ***Flexibility in Communication***

Failing to adapt your message to your audience can lead to miscommunication. Be flexible and willing to adjust your message based on your audience's feedback and reactions.

### ***Iterative Message Refinement***

Remember that communication is an iterative process. Use the feedback you receive to continuously refine and improve your message. (N.A, 2024).

By avoiding these common mistakes, you can ensure your audience analysis is effective and your technical communication is successful. Remember, the key to successful audience analysis is understanding, empathy, and adaptability.

## ***Conclusion***

In this chapter, we've explored the importance of audience analysis in technical communication. We've discussed various techniques for understanding your audience, including surveys, interviews, observation, and secondary research. We've also highlighted the importance of tailoring your message to your audience, considering their needs and expectations, and engaging them effectively.

Audience analysis is not just a step in the process of creating a document or presentation; it's a critical component that can significantly impact the effectiveness of your communication (Schwertly, 2024). By understanding who your audience is, what they need, and how they prefer to receive information, you can create messages that are more likely to be understood, accepted and acted upon. As we conclude this chapter, we encourage you to apply the principles and techniques of audience analysis in all your communications. Whether you're writing a report, giving a presentation, or even sending an email, taking the time to understand your audience can make your communication more effective and successful. Remember, good communication starts with understanding your audience.





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