Part I (Foundations)

Audience

Technical communication begins with analyzing the intended readers, called the audience. Technical writers answer the following questions to analyze their audience before they begin writing:

⇒ What does the audience already know?
⇒ What does the audience want to know?
⇒ What does the audience intend to do with the information?

In communication, the 'audience' is the person or group of people whom you expect to read your information. Even though writers do not know exactly who will read their documents, they can usually define an intended audience as technical, semi-technical, or nontechnical.

Technical audience:

Technical audience includes those with technical experience and training, such as technicians and engineers. A technical audience understands fundamental concepts and jargon without definitions or background information. Readers expect the writers to use technical language efficiently and appropriately. For this audience, writers use technical terms and precise data to convey information.

Semi-technical audience:

Semi-technical audience has some technical training or works in the industry, but not directly in the field or related technical areas. This audience needs some explanations of concepts, abbreviations, and jargon. Writers use technical terms only if they are common in the company or industry. This audience might need an orientation to the subject and explanation or interpretation of the terms and information.

Nontechnical audience:

This type of audience is the general public, an unknown audience, or any combination of technical, semi-technical or nontechnical readers. This audience expects a clear organization that progresses from the background to the new information, with examples or illustrations to explain points that may be confusing. For this audience, writers provide the most comprehensive treatment of the subject such as common terminology, simple language, a full background and orientation to the subject, and a complete discussion of the main points. To simplify difficult concepts, writers often compare technical processes to more familiar ones through analogies and metaphors.

The audience, whether technical or general, might want only the highlights of the information. Or the audience might want detailed information including the background, procedures used, visual aids, data tables, and your conclusions.

People read technical information for a purpose. Sometimes that purpose is simply for general interest. Other times, the audience wants to follow the procedures, solve a problem, or make a decision. Writers must anticipate questions and provide the organization and details this audience needs.

Generally, writers sometimes make false assumption about their audiences as:

⇒ The audience speaks and reads English.
⇒ The audience will read the complete report or manual.
⇒ The audience will remember what they tell them.
⇒ When listeners or readers don't understand, they will ask questions.

Thus writers have to be careful about the audience before presenting their writings.

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Language and Style

The language and style writers use for technical communication depends upon the audience – the background, need, and purpose of the people who will read the information. Writers choose the most effective terms, writing style, and organization to make the subject understandable to their audience. Generally, technical writers use precise Voice form, Sentence length, Negatives, and Tone for effective technical communication.

Voice:

A message can be communicated either by speaking or in writing. In speaking voice and tone can be varied to communicate the message effectively. Speakers can learn how to use their voice to inform, persuade, and entertain an audience.

In writing, we have the most common voices called active and passive voice. The active voice emphasizes the fact that the subject of the sentence does something. It directs attention to the subject. Most technical writers today write predominantly in the active voice because it is more direct and easier to understand and follow. The passive voice emphasizes the idea that the subject is acted upon. Passive voice is effective if the acting agent is not important. Mostly, while writing procedures or instructions, writers avoid passive voice.

Sentence length:

Technical communication can be full of ideas and facts. Shorter sentences are usually easier to understand than long, complicated sentences. Critics agree that sentences over 25 words are too long for most readers to understand. A message consisting of only short sentences will sound choppy and artificial; sometimes the relationship between ideas gets lost when sentences are too short. A document wit sentences that are similar in length and structure sounds dull. Variety in sentence length and structure makes the message more interesting. Technical writers must pay close attention to sentence length for understandability and interest.

Negatives:

Understanding negative sentences is difficult. People often misread or fail to see the negative word, such as 'not' or a negative prefix, such as 'non' or 'un'. Understanding a negative sentence is especially difficult when the sentence contains two (or more) negative terms. Generally, two negatives are removed into an active, positive form. However fast readers might miss one of the negatives and arrive at the opposite conclusion for what the author intended.

Tone:

Tone is the attitude or emotion of the writer expressed in word choice. Tone can be formal or casual. It can be positive, negative or neutral. Writers set the tone of their documents by the words they use.

⇒ Formal English creates a formal tone but this tone is thought to be too stuffy.

⇒ Informal English, using slang or abbreviated words, sets a casual tone but this tone is considered to be unprofessional.
⇒ Highly value-laden words or decorated flowery words set an insincere tone and is considered to be emotional.
⇒ Sarcastic or angry words set a negative tone so it is considered as unproductive and mean.
⇒ Neutral words set a businesslike tone, free from emotion or manipulation so it is the preferred tone in business writing.

The writers should try to keep a neutral tone in most business writing. Avoid abrupt shift in tone because shifting in tone is often confusing to readers.

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Organization

Organization of paragraphs is very much important for the writers to make their view clear to the intended audience while using appropriate language and style. Organization of paragraphs is also the main skill in writing outlines and taking notes.

The writer uses several techniques that can be used as organizational aids such as an introduction sets the stage for the rest of the article. A heading in large fonts identifies transitions to new ideas. The bulleted lists draw attention of the reader to the material and make it easy to read. A figure included in the writing illustrates the comparison of verbal communication to the electronic analogy. A summary put at the end restates the main idea that helps the readers to regain the thesis of the writing.

Classification:

Before starting a paragraph, writers must decide what the topic of the paragraph will be. Usually a paragraph focuses on one main idea and the supporting ides for that main idea. Sometimes writers start an outline of the topics they want to include in the entire document, and then start to organize the ideas into logical paragraphs and sections. Well written technical articles present information in an order that eliminates the need for repetition. Once a term is defined it can be freely used in the entire document. Each section of the article discusses only one idea. Key ideas are underlined or titled. Ideas presented in an order that prepares the reader for the next idea.

Technical writers plan the logical ordering, or organization, of information called outlining, which is a numbered and lettered sketch of the contents. Grouping or classifying information is also a method that some people use for memorizing information.

Writing Lists:

A list at the beginning of the paragraph, section, or report is an effective way of telling the reader how the article has been organized. Punctuation marks like a colon used before the items states a list or still bullets or numbers can be used for listing to make the writing list clear for the readers.

Topic Sentences:

Each paragraph should have a main idea. If it is stated in a sentence, it is called the topic sentence. The topic sentence sets the limits of the paragraph. It can appear at the beginning, middle or at end of the paragraph – or not at all being an inferred topic sentence. Good technical writers usually start each paragraph with a clear topic sentence to ensure readability and logic.

If the topic sentence becomes the central idea of a formal report or document, it is called a thesis statement. Formal report begins with a thesis statement, followed by main ideas, each supported by details. If the topic is the central idea of an informal report or memo, it is called a topic statement or subject statement.

Outlines:

It is sometimes difficult to start a document with intended ideas to convey and it's ordering. Writing outlines can reduce the uncertainty. Outlines also save time. Topics can require subtopics. If a topic gets long and complex, write a list of ideas just for that topic, and you have your list of subheadings. Formal outlines can become elaborate, with Roman numerals, letters, and Arabic numbers, all intended to show a parallel structure. Outlines can also be simple lists of ideas. Experienced writers learn to develop full documents based on simple lists. To write an outline, write the main ideas and important details in condensed phrases. Writing an outline is a way of selecting the main ideas and important supporting details. Practice and careful reading or listening will improve this skill.

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Part II (Writing Elements)

Technical Definitions

Definitions of terms are the foundation of technical writing. A precise set of terms is used in technology, and only with a common understanding of those terms can information be communicated accurately.

Some terms used in technology have different meanings entirely different from those with which you are familiar in everyday life. Some terms are used with more precision in technology than in everyday life. Some terms are frequently confused. Thus the concepts need to be explained can never be specific unless we learn the use of those words technically. Technical definitions can be categorized thus:

Informal Definitions:

Informal definitions are generally place between commas or parentheses e.g. Resistance: opposition to current flow or A potentiometer (variable resistor) is used for volume controls.

If too many informal definitions are used, a report may become disjointed and distracting. Normally, a writer using more than two unfamiliar technical terms in a report will define the terms formally in the introduction or glossary.

Formal Definitions:

A formal definition has two functions: it identifies the larger class that the term belongs to, and it provides distinguishing characters. A formal definition can be written for any technical term, and often the most difficult part is determining the class. So, accurate distinctions of terms is very much necessary

Technical writing can be made efficient by not repeating or rewording terms. Technical terms and jargons describes an idea or concept in a few words but the disadvantage of jargon is tat it assumes that the readers also understands the technical meanings of the term and the result will be wordy and cumbersome. So it requires explicit definitions of terms in clear and simple language.

Extended Definitions:

Some objects or concepts require more than one-sentence definition. An extended definition might require a paragraph or even several pages to fully define a complex concept or object. An extended definition includes the standard definition sentence, but also provides more details that describe the object. It can contain related definition and examples that illustrate the term.

Dictionaries:

Dictionaries are written for certain audiences. Small dictionaries provide only thee most commonly used words and definitions whereas technical or scientific dictionaries offer only technical terms and definitions. So technical or scientific can also serve the purpose to define up the idea or the concept explicitly to the readers.

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Technical Descriptions

A technical description can be part of a larger report or a report by itself. It is especially important when the report concerns a device, tool, process, or concept that is new or unfamiliar. Description normally includes a definition of the object, an orientation to the overall characteristics, followed by detailed description of the parts in a logical order. For example, to describe a device, a writer would first describe the function of the device. Next, the writer would describe the physical appearance of the object and its component parts, one by one, in the order in which they appear or play into the larger function of the device itself.

Comparisons:

Technical descriptions sometimes compare unfamiliar objects or concepts to familiar objects or concepts. In technology, people need to express values, shapes, angles and joints in concrete, meaningful terms. To do this, we use familiar or graphical terms to describe size, structure and location. Many fields use the abbreviated method of describing a complex design or shape to add exactness of their language. Comparisons are useful for explaining and understanding.

Analogies:

An analogy is a formal comparison based on the resemblance of two unrelated objects or ideas. An analogy is useful only if the two concepts have more than one similarity. For descriptions written to technical audiences, writers include the specific details and terms used in the industry.

Technical Slang:

Clear technical description can be produced by avoiding technical slang, words used within a specialized area that are unfamiliar to the public. This is important when communicating to customers, superiors, or subordinates, who might be confused by the slang terms. During communication, it is important to prevent misunderstandings, and this can be dome by using the most common, yet accurate words possible.

Clichés:

Some speakers and writers overuse comparisons to add colour to their words. Overused comparisons are called clichés, and they should be avoided in technical writing.

Physical Description:

The technical description of an object generally starts with the general information, and proceeds to specific information. Regardless of the object being described, a physical description has the same purpose: to present the facts about the object. Technical writers use descriptive terms carefully and precisely, with exact terms. They use modifiers sparingly, but when they do the modifiers are adjectives that add meanings to the concept. Avoid abstract and vague terms. An outline for the physical description contains the following guidelines:

⇒ Orientation to the object or device: it includes a technical definition, and when and why the device is used.
⇒ General description of the device: It includes the overall dimensions, appearance, and components of the device.
⇒ Description of each component: It includes a sequential or logic order with its physical appearance, purpose, and relationship to other components.

Process Description:

The technical description of a process describes how something works, beginning with general information about the overall function of the process, and proceeding to the specific materials or skill required. The description can include a flowchart or schematic to show the sequence of actions or decision points in the process. An outline for process description contains the following guidelines:

⇒ Orientation to the process: It includes a technical definition, and when and why the process is performed.
⇒ General operation of the process: It includes the main divisions of the process; materials, skills, and time required; and pre-operation conditions.
⇒ Description of each step in the process: It includes why and when it takes place, how long it lasts, and any human intervention required.

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Summaries

A summary is a condensed account of the essential information included in a longer piece of writing. A summary usually appears at the end of an article or report. The function of a summary is similar to that of a schematic diagram, which gives a clear, brief presentation of a device without the clutter of the actual materials necessary to build the device.

A summary answers the basic questions that readers want answered before they devote more time to reading the article or book. Many people interested in keeping up with technology do not have time to read every article printed about their field. They often rely on professional abstracts to find the most useful articles. A reader searching for information has predictable questions like what, why, where, when, why and how for each article.

Guidelines for writing the summary:

- ⇒ Read the article carefully and use a pencil to highlight key ideas, phrases and conclusions.
- ⇒ Look for the author's own summary before reading the article.
- ⇒ Note the author's organization.
- ⇒ The length of the summary is usually shortened to 33% of the original.
- ⇒ Avoid personal interpretations, agreements or disagreements.
- ⇒ Use third person pronoun.
- ⇒ Re-read the article once more and compare to the summary written.

In a summary, writers reword and condense ideas. Copying exact sentences is considered plagiarism. Avoid plagiarism while writing a summary or any piece of documentation, for that matter.

Executive Summary:

An executive summary is a modified summary located at the beginning of a report or document. Its purpose is to highlight the bottom-line information needed by upper management to make a decision, including staffing, budget, and timeline considerations, sometimes in a bulleted list. It might also include a final recommendation or conclusion, depending on the purpose of the report. If the document describes a research project, the executive summary includes the purpose, background, results, conclusions and recommendations, written for a semi-technical or nontechnical audience.

Abstract:

An abstract is typically a one or two sentence summary that includes the author's name, publication and date, and keywords used by databases, librarians, abstracting services and others to locate articles on specific topics. Abstracts sometimes contain related and alternatives terms so that people can find the article using a word search, and they can use the related words to widen a computer search for a topic. People obtain abstracts to determine if they want to read the original article.

Abstracts can include the author, title and subtitle, source, description of the article, and identifier keywords related to the topic.

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Graphics

Graphics are visual representations of objects, numbers, and other data in the form of pictures, diagrams, graphs and charts. The purpose of using graphics is to present information in a visual way and to clarify concepts such as location, size, relationship and comparisons. Graphics can increase interest and readability of documents for readers who might shy away from blocks of solid text. At present computers and graphics software programmes has helped a lot for a professional and polished look of any article or document.

Besides digitized images, writers create and insert a wide variety of graphics that supplement written materials. Graphs are representations of numbers and data in one, two or three dimensions. Graphs must be complete as well as accurate. Graphics add to our knowledge as well as entertain us.

The main types of graphics used in technical writing are photographs, line drawings, graphs, and tables. The purpose of adding graphics to technical report is to supplement the written materials. Graphics are not used to repeat information that s already clear to impress readers, nor are graphics used to lengthen a report. Effective graphics can clarify information, organize data, and emphasize important points. The measures of effective graphics are simplicity and usefulness.

Photographs:

Camera-produced graphics are easy to insert into reports using a scanner or digital reprints from negatives. They may be useful to show the overall appearance of an object but line drawings also serves this purpose. If used, photos should be always clearly focused and include the intended object – easier said than done. Because photographs do not necessarily indicate size, some photographs shoe the object near to something common.

Line Drawings:

Line drawings include the vast majority of the graphics in your textbooks. Schematics, drawings of components, and block diagrams are all examples of line drawings. While using line drawings all the significant parts of the drawing should be labeled. Standard abbreviation should be used. Adequate white space should be added. Appropriate font, cross sections and block diagrams should be included.

Graphs:

Graphs include displays of numerical data using bars, lines, curves and circles. The purpose of graphs is to help the audience visualize the effects of a changed variable on a subject. The display often emphasizes a trend or illustrates the results of an experiment. The best graphs used are waveforms and exponential curves.

Bar graphs: It shows evenly spaced bars extending vertically or horizontally. Some writers print the exact value inside each bar, which are especially helpful when precision counts.

Line graphs and waveforms: Line graphs and waveforms are made up of dots placed at coordinates according to fixed increments on the vertical and horizontal axes. The dots are then connected by straight lines or smooth curves to show the subject's response to changing conditions. The horizontal axis shows the changed condition, and the vertical axis represents the subject's response or activity.

Pie charts: Pie charts are portioned circles in which each partition represents a percentage or proportion of the category.

Tables: Tables are displays of information in columns or rows. There is no limit of columns or rows, and the values within the tables are precise. Tables are used to compare and contrast the features of two or more objects.

It is important to be aware that graphical representations of data can be misleading. The graphics can be constructed in ways that visually distort the data without being exactly dishonest.

Computer Images:

Writers sometimes create and process their own computer graphics images, sometimes through classroom training, mentoring, or just plain trial and error. There are many alternatives to creating our own graphics, including clip art, graphics editor, screen captures, and scanners.

Clip art: Many word processing programmes and Internet sources provide batches of images that we can copy and paste, drag, or insert into our documents. Some include graphics with sound and motion.

Graphic editors: Many programmes like Adobe Photoshop, JASC Paint Shop Pro, and Microsoft Paint, usually include an editor for creating new images and working with existing images.

Scanner: A scanner is an electronic device that you connect to the computer to reproduce a hard-copy image as an electronic image. Any photograph placed on the bed of the scanner, the device converts the image into an electronic format, and we can save it on the computer in the file format as preferred and used it for our document.

Screen captures: If we want to reproduce an image visible on the computer screen, we can take a screen capture of the image on the screen, similar to taking a photograph of the screen and then it can be pasted in the graphic editor and save it for the preferred purpose.

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Instructions

Instructions provide an overview of the device, such as the purpose of the instructions or functional and starting state of the device. Instructions also specify the materials including sizes, part numbers and quantities needed to complete the procedure. In each step, usually numbered, the writers use active sentence and imperative mood with the use of second person pronoun 'you'. Instructions also include graphics when needed for clarity or understanding the text, or add a description under the graphic to orient the reader to the figure. A conclusion is also included at the end of instructions so as to describe the final state or optional procedures.

Guidelines for the general process of writing Instructions

⇒ **Perform the procedure yourself:** Before writing an instruction we have to read the whole process so as to become familiar with all the features and terminology.

⇒ **Prepare the working draft:** Write a draft of the numbered steps and make it read by others and get the feedback to revise the missing parts or confusing information.

⇒ **Write the steps using simple, direct language:** While writing an instruction simple and direct language should be used. All the vague and confusing terms should be replaced and use second person 'you' with imperative mood.

⇒ **Include graphics if needed:** Not all instructions include graphics. However if the steps include parts' names, users will appreciate a graphic that illustrates or label the difficult part.

⇒ **Format the instructions to identify the organization:** Select the layout and format that make the instructions clear and easy to follow. The brief, simple numbering steps are considered appropriate. Headings, font size of the heading and making them bold is necessary for long steps.

⇒ **Write an introduction to' orient the reader:** Explain who should follow this procedure and why, when or where to follow it. This information lays the groundwork for the instructions and identifies the intended audience and outcome.

⇒ **Add materials if requirements list:** Include all equipment, tools, or more minimum requirements needed for the complete project. A bulleted list could be produced to make the items easy to spot. Precise quantities, sizes, and part numbers could also be included as needed to make the instructions clear.

⇒ **Identify notes and warnings:** Use clear wording and formats to highlight information that has special importance for the readers. Use note, tips, cautions and warnings according to the conventions of your style guide.

⇒ **Edit, revise, and refine the language:** Review the document and if possible ask other people to review it. Review should be based on two factors: one for language and the other for technical accuracy. Each reviewer might suggest different revisions.

⇒ **Observe someone follow your instructions:** The best way to test instructions **is** to ask someone to read and follow your instruction. Avoid helping the subject; let the person rely only on the written information. Keep a record pf difficulties experienced by the tester.

⇒ **Put the final touches on the instructions:** Complete the final revisions based on testing. Take a last look at the layout and send the document to the printer.

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Comparison and Contrast

When two or more objects are being compared, we often use a technique called comparison and contrast. Writers want to present facts and details in a meaningful, sometimes in a persuasive way, so that a reader can see the differences and similarities of the objects.

In a comparison, we look for correlation. In a contrast, we look for difference in certain features. It is important to determine the standards of comparison before beginning a report.

Elements of comparison and contrast report:

Comparison and contrast reports contain three main parts: an introduction, a body of information, and a conclusion, which makes a recommendation.

The first part of a comparison report, the introduction, states the standards of comparison: a short description of the features that will we discussed and why those features were chosen.

The second part of the report, the body is the comparison and contrast of the products and their features. It is important to write parallel descriptions of each product. The features described for one product are described in the same order for all the products. If a feature is missing on a product, it is noted.

Information in the body can be organized in two ways. The **point by point method** itemizes the features being examined: function, display, cost and complexity of use. For example, if products A and B are being compared, the first paragraph might compare one feature of both products. Whenever something is said about A, the parallel information about B is presented. The next section will describe another feature of both products. The heading for each section is the feature being described.

The **block method** is organized by the products. First, all the features of product A are described in a block, and then the parallel features of product B are described in a block. The features of product B are described in the same order as they were described for product A. The heading for each block is the product being described.

The final section of a comparison and contrast report, the conclusion, restates only the major points that led the writer to make a final recommendation. The recommendation is a logical conclusion based on the evidence presented in a report. Sometimes the writer proposes several recommendations that take into account the possible priorities of the reader.

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Part III (Forms of technical Communication)

Technical Reports

Report is generally described in a way to give people information about something that you have heard, seen or done. Such information is generally presented in a written or spoken format. In this chapter three basic report formats are focused upon: the descriptive report, lab report and proposal.

Layout guidelines for writing report:

The appearance of a report adds to its visual interest and readability. Writers can use the followings in a technical report:

- ⇒ Headings to show the organization and flow of information
- ⇒ Graphics add clarity to concepts, objects, or procedures
- ⇒ Charts efficiently contrast or summarize details
- ⇒ The white space or margins and between elements adds breathing room for readers.

The following guidelines add consistency, unity and cohesiveness to the documents:

- ⇒ **Alignment**: Align elements to consistent margins.
- ⇒ **Contrast**: Distinguish between differing elements on a page such as headings, sub-headings, quote etc.
- ⇒ **Proximity**: Group items that relate to each other close together.
- ⇒ **Repetition**: Repeat the visual elements of colour, shape, texture, spacing and the line thickness throughout the document.

Descriptive Reports:

A descriptive report is a formal document with a specific audience, format, and purpose. A writer must analyze their audience before writing the report by identifying the basic three questions: Who the audience is? What does the audience want to know? What does the audience intend to do with the information? The answer to these questions will influence the language, content, organization and the supporting elements of the report.

The purpose of the descriptive report is to describe, define, explain, document or teach or any combination of these purposes. To achieve the purpose for the audience writers must organize information clearly, emphasize main points, and provide the backup information needed by the audience.

A descriptive report relates the physical appearance of an object in words. It may be followed by pictures or line drawings that enhance the description, but pictures should never be considered a substitute for words.

Some basic guidelines for writing description are as follows:

- ⇒ Always start with an outline.
- ⇒ Have the object in front of you as you write your outline.

⇒ Always begin with an introduction.
⇒ Use precise terms and measurements but avid abbreviations for highly technical terms.
⇒ Describe the function of each part of the object briefly.
⇒ Include graphics or line drawings if it clarifies the ideas.
⇒ Label each main section of the report.
⇒ End with a summary and number the pages.

Sample Report Format:

I. Preliminary Section
1. Letter of Transmittal or preface
2. Title page
3. Executive summary or abstract
4. Table of contents and List of Figures and Tables

II. Main Section
5. Introduction and Thesis Sentence
6. Body
7. Summary and/or Conclusion
8. Tables and Figures (If not included in the body)

III. Documentation
9. Notes (footnote or endnote if needed)
10. Bibliography
11. Appendix

Lab Reports:

The formal lab report describes a lab test or experiment using industry conventions of methodology and reporting. A typical purpose is to report the results of an experiment to an audience so that they might replicate the experiment or conduct further research based on your result.

Scientists or engineers might present test findings in formally bound reports such as listed below:

⇒ **Title page**: The front sheet that states the title and also includes your name, section class, date of submission and instructor's name.
⇒ **Purpose**: States a one sentence objective or purpose of the experiment.
⇒ **Theory**: State the basic formulas, theories, assumptions that are used in the experiment.
⇒ **Equipment and components**: List all the equipment and components and the number of these items used in the experiment.
⇒ **Procedures**: Explain in detail what you did and how you did it. Diagrams can be included to clarify ideas.
⇒ **Results**: List the raw data or results of the experiment.
⇒ **Discussion**: Analyze the results of the tests. Probably the longest part of the report as you relates theory and scientific principles, equipments and procedures used in the experiment.

⇒ **Conclusions and recommendations**: Discuss the results and relate them to how successfully you achieved the objective.

Technical Proposals:

A proposal is a persuasive document that attempts to convince the readers to adopt or purchase a service or product. Proposals vary in size and length, usually becoming longer and more formal as the cost of the product or service increases. Proposals can be of the following types:

⇒ **External**: Written to other companies such as when proposing to sell your service or product.
⇒ **Internal**: Written within your own company such as when proposing a new service or product for your department
⇒ **Unsolicited**: Sent without being requested such as when your company wants to develop new customers.
⇒ **Solicited**: Requested by your department or company such as when responding to customers inquiries, grants, or requests for proposals.

Formal proposals typically include the following elements:

⇒ **Cover Letter**: Address the letter to the primary decision maker such as the president of the company. It should be brief and to the point emphasizing on the main point of the product.
⇒ **Title Page**: For competitive proposals using graphics to make attractive.
⇒ **Table of Contents**: Used when the report is longer than a few pages.
⇒ **Executive summary**: The most important part of the proposal that includes information for the upper management to make decision. Bulleted list should be used to make reading easy and understandable. Active voice and second person pronoun 'you' is used for description.
⇒ **Discussion**: Includes the reasoning for the proposed service or product.
⇒ **Proposed service or product, or comparison of products**: The main body of the report. It might include a technical section for technical experts and a management section for a more general audience.
⇒ **Your company's background or experience**: For external proposals. This helps establish credibility and confidence in your company.
⇒ **Budget**: Itemize the categories such as components, labour and overall totals.
⇒ **Appendixes**: Includes supporting materials and other product data if needed.

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Forms, Memos, and E-mail

Forms are preprinted formats for recording specific pieces of information. Memos are brief, open-ended communications addressed to a specific person about a stated subject. E-mail provides an electronic medium for both types of communication – memos and forms. E-mail can transmit business letters and reports.

Forms:

Each company and industry has its own standard and customized forms. Because formats are designed to furnish precise and efficient records, we must attend to the specific labels to determine that information to include in each lime or box.

- ⇒ Some forms include detailed instructions, such as tax forms. Most business forms have brief labels or titles for sections, columns and rows.
- ⇒ Some forms are available online, and you can complete and transmit them on your computer.
- ⇒ Some forms require an entry in every box or line.

Guidelines to fill out forms:

- ⇒ Write or print form neatly with correct spelling and clear wording help.
- ⇒ Check out information that isn't easily supplied.
- ⇒ Do not overlook questionnaire and anticipate the asked question properly.
- ⇒ Record your procedure and se it to fill in the form.
- ⇒ Use standard abbreviation and symbols to fill up the form.

Memos:

Memos can be used to call attention to your projects, effort, coworkers and plans. They are used to praise, inform, question and complain. But they all have the potential to become a permanent record. Because memos are generally short so they are planned very carefully than reports. Memos can be prepared in three different types: **Status memo**, **Negative memo** and **Personal memo**.

A status memo informs others of the state of a project or situation. IN status memo, stay positive and action-oriented, yet realistic.

Negative memos are written to reject, disagree, complain, or admonish. When a negative memo is written, it couldn't be erased later. So, the message that is written should not be damaging to you and others. Because negative memos cannot be softened by body language or voice tone, your written words may be stronger than you intention so try to sound like a businessman and factual. Attempt to identify and resolve underlying issues.

Personal memos are written to convey private information. We need to be aware of confidential information while writing personal memo.

E-Mail:

Most businesses routinely provide Internet access to employees to carry out the work efficiently and for instant response. To receive and send E-mail, users must set up an e-mail programme. Most e-mail programmes provide a template, similar to a memo format at the top of the message. The following guidelines need to be remembered specifically for e-mail users:

- ⇒ Enter the address.
- ⇒ Attach documents and files with the e-mail, if needed. Describe the attachments in the text of e-mail, including the size of the file.
- ⇒ Fill in the subject line with the brief topic.
- ⇒ State the purpose or scope of your e-mail in the first paragraph.
- ⇒ The language of your e-mail depends on your audience and purpose.
- ⇒ Be specific about what you expect and how to reach to a solution, if you are requesting an action from the recipient.
- ⇒ Keep humour to a minimum.
- ⇒ Include your name, title, mailing address, phone and fax number, and e-mail address in your closing for alternatives for return contact from the recipient.
- ⇒ Re-read your e-mail before sending.

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