

**What matters should be taken into consideration while thinking consideration while thinking about aim and audience? How do they help in effective communication?**

The writer must be clear about his/her aim in preparing a document if she/he wants the document to fulfill the intended effect. The writers aim in writing a paper may be to explain, to instruct, to recommends, to persuade (convince), to protest, to reject and so on. The selection of details, organization and presentation are different according to these different aims. For example, the description of a fire extinguisher will be sharply different from an instruction on how to use it. If a writer is writing an instruction for its use describes it instead, no reader can follow the guidelines for using it. This example shows that even when the subject of writing governs the organization, language and style of a document.

For communication to be successful, the writer should know the readers needs and interest. Therefore, the aim or objectives of a writing or document are formulated according to the readers aims. The writer should evaluate what the readers' wants to do after reading the paper. After both the writer's purpose in preparing a document and the reader's purpose in reading it are determined, the writer should think about evaluate whether all the readers are **alike or they are a mixed group, what they already know about the subject, what they need to know, their attitudes to the writer and the topic, and their physical context.**

On the basis of prior knowledge, the audience can be divided three categories:

1. Technical
11. semi- technical
111. Non- technical

The Writer writing for technical audience can use technical shorthand, a lot of acronyms and jargons. The writer should use less of them when writing for semi-technical audience; and s/he should be as plain as possible when the report is intended for not-technical audience. Attain, if the audience is of mixed type, the writer can choose the level of complexity by determining their lowest common knowledge. Besides, it is also desirable to know the choice, preferences, and prejudices of the reader while writing a document, similarly, the writer should ascertain the capacity and intellectual level of the readers before writing. This helps the writer to choose the proper rate of unloading information. Moreover, it the reader reads the document in a peaceful library, a noise laboratory or in a cramped corner beside a machine because, style and complexity should be different in each of these situations if the communication is to be successful.

**How can step-wise plan be made to make writing effective?**

**OR**

**What are the normal stages to be followed before writing/preparing/turning out and actual document?**

Writing cannot be done at once if it is to be effective. Actual writing is done after a process of careful planning and conscious preparation. This process of planning and preparation cannot be rigidly laid down for everyone to follow. Individual writers can make their own plan and have their own process, but good writing must follow some planning. In general the following steps can be taken into consideration:

At first, the writer should analyses his/her aim. The writer's aim may be to explain, to describe, to construct, to warn, to protest etc. in each of these situations, although the object may be the same, the

document produced will be sharply different. After determining the objectives, the writer then should analyses the audience. Again, the choice of style, use of technical acronyms and jargons will be determined by the type of audience. The writer should make a rough plan of the document, consisting of major headings, and key word s, concepts and phrases that are to be used in different chapters. All these activities done before the actual writing is started can be called pre-writing activities. When the processes mentioned above are followed through, the writer can do the actual writing. But what is written in the beginning can rarely be a final document, processing all the qualities that a good document has. Therefore, **in the next stage**, it is advisable to make a synopsis and discuss it write friends, so that the side-issues and gaps is the writer's thought can be detected. **Only then** can the draft of the text be prepared. Drafting can be smooth and speedy if it follows a food planning. While preparing the draft, it is not necessary to be worried about the nitty-gritty of grammar and punctuation and style. Drafting should be done slowly and it is better to do the work in short time spans rather than completing the whole work in single sitting.

When the draft is ready, a lot of work is already over. However, it doesn't mark the end of the writer's efforts. After the draft is completed, it is good to leave it for some time and revisit it after some days. Such practice enables the writer to make good review of the stile, organization, strengths and weaknesses of the text. Finally editing should be done. At this stage, the writer should check the logical development of ideas, organization and layout of information, grammar, punctuation, and other elements of style. When all the corrections are make, the text can be printed afresh and distributed.

**While considering the organization and layout of information in a document, what elements of layout and what parts of document should be thought about carefully?**

Often, the rules of organization and layout, except for the matters of margins, page number, locating of headings, can be different in different parts of a document. Therefore, rather than. Looking for a set of general rules that apply to the whole document. Therefore, rather than looking for a set of general rules that apply to the whole document, it is better to think of the organization and layout for each part separately. Again, there may not be hard-and-fast rules for organization and layout. Rather, much depends on practical consideration on how the given document and information can best be presented so as to fulfill its purpose effectively.

Special attention should be paid to the following parts:

1. The title page[placing of title; wording of title; size of the letters used in title]  
[Please elaborate these elements yourself.]
2. Summary: if possible, summary can be given in the title page. If not, it should be included in the page immediately following.
3. Body of the report: Christopher Turk and john kirkman suggest the following arrangements for the body of the report:
  - a) Table of contents: [use specific heading, subheadings; use decimal numbering system for headings & subheading; indent sub-headings from heading; headings should be full and informative]
  - b) List of symbols, abbreviations and definitions [although they are often found in the end of texts/documents, they can best be placed in the beginning because the readers need to know them before studying the report.]
  - c) Introduction [it shouldn't be the summary; background information should be provided; history of earlier research related to the report, etc.

- d) Account of the work done
- e) Results/findings
- f) Discussing/analysis/argument
- g) Conclusion
- h) Recommendations
- i) Acknowledgements
- j) References
- k) Appendix for tables, figures & graphs
- l) Appendices

### **What is the proper order for presenting information, results or ideas in the document?**

Logical order is followed should be followed in presenting information and ideas in a document. But there are different logical orders. For example; information can be arranged in ascending order, starting from less important detail and ending in more important details. Or the reverse of this order, the descending order, is also another logical order for presenting information and ideas. In technical documents, descending order is preferable to ascending order. Most readers may not have enough time to go through the whole document. When information is arranged in descending order, readers feel convenient. They can read as much of the document as they need, and stop at that point. When information is presented in ascending order, they need to read the whole document.

### **What is the appropriate style for technical writing? What elements come under it?**

Style for imaginative literature differs from the style used for technical writing. In technical writing, communication of information is the chief goal. So ornamentation is not desirable. However, effective style should contain a variety of structures and usages, rather than limiting it to a limited set of choices. Therefore, flexibility and variety should be used to make the style readable and convenient for the readers.

The first determinant of style is the writers' ability to judge the interests, needs and prior knowledge of the readers. The writer runs the risk of bearing the readers if bearing the readers if the choice of language and layout is not appropriate. Besides, the writer should also be able to predicate the attitude of the reader, and should be careful not to offend them.

To go into the practical considerations of style, sentence length and structure occupy very important role. Sentence length for technical documents should be in general of 25 words. However, only short sentences can be monotonous. Long sentences can be used; but they are more suitable for presenting background information and general ideas. While introducing new ideas and concept, short sentences become more effective.

One problem in sentence length and structure comes from a nominalization as well. In scientific writing many actions are thought of concepts, so there is a habit of nominalization. Instead of simply "the problem measured the internal diameter", a writer can write 'measurement of the internal diameter was performed by the problem', to avoid this habit of turning verbs into nouns, we should not use general purpose verbs like 'performed,' 'carried out', 'understand', 'conducted' as far as possible. Also, the use of impersonal and passive structures, which became a dogma of science in the 19<sup>th</sup> century, contributes to the complex, roundabout structures. Therefore, the writers in science and technology should

feel free to use personal pronouns. It does not undermine the credibility of the writing; rather it enhances its credibility and authenticity.

Next important element of style is also the choice of appropriate words. Some writers believe (wrongly) that long words are impressive and they are necessary for the dignity of the write. But, in fact, they just create over formality in writing. Wherever possible, everyday words should be used. Long words only confuse readers, and sometimes their use only reduces the concreteness of the message. It is wiser to avoid words of Latin origin, and to drop the unnecessary use of jargon. Similarly, the redundant, roundabout phrasing must also be dropped. All these considerations are of invaluable help for developing proper style for technical writing.

### **What are algorithms? Where are they suitable?**

Algorithms are carefully planned sequence of statements, questions or instructions arranged in a logical hierarchy. Algorithms are used for clarifying complex possibilities & procedures. Often the readers need to reach decisions quickly on the basis of information. In such situations, they ignore information not relevant to them. Algorithms are inevitable (necessary) while presenting information with complex inter-relations.

In general, there are three kinds of algorithms used in scientific and engineering work:

- i. List-form algorithms.
- ii. Flow-charts, and
- iii. Maintenance analysis procedure (MAP) layouts. Among them, list-form algorithm is an improvement over plain text and it also is clear and to the point. Furthermore, it is easier to make than flow-charts and map layout.

In comparison to list-form algorithm, a flow chart has more visual impact as it guides the readers eye from one bit of information to the other. Also it used different types of symbols to emphasize difference between different types of information.

The MAP layout is clear and it takes less space than flow-chart. But it does not have as much visual impact as the flow-chart because it doesn't use shapes to present information.

### **What is summary? How is it different from a précis? What are its types?**

A summary is the condensed account of information presented in a book or a report. The readers sometimes do not have enough time to read the whole report; therefore rely on summary, especially executive summary, to reach the decisions. Summaries familiarize the readers with the stages and parts of the report or document it also helps the readers' memory by providing repetition and reinforcement.