UNIT 1 OVERVIEW OF COMMUNICATION PROCESS

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1.0 OBJECTIVES

After reading this Unit, you will be able to:

- get an insight into the various writing modes to obtain a correct view of the process of writing;
- comprehend the nature, scope, and functions of technical writing and its importance
- and value in professional activities of library and information service; and
- have a clear perspective to pick up appropriate skills in technical writing to suit various writing situations.

1.1 INTRODUCTION

This Unit gives an overview of different aspects of communication namely oral, written and audio-visual. The value of written communication is stressed.

Considering that the writing skills need to be acquired by library and information professionals, this Unit gives a few illustrative examples of relevent writing situations.

Different writing situations call for different writing skills, depending upon the context and purpose and functions the writing has to perform, the focus of attention being always on the audience to whom the writing is meant for. The actual writing process involves:

i) accurate and precise understanding of the audience to whom the communication is addressed;
ii) good basic knowledge of the subject of writing;
iii) good command of the language in which the communication is written;
iv) technique of collecting data and information from appropriate and reliable sources;
v) presentation of written material in the most appropriate form, using reference guides and style manuals for drafting and formating;
vi) good working knowledge of the modes of production, both print and non-print;
vii) abiding interest in reading, both general and specific to the subject of writing, not only to be abreast of current developments but also to derive strength for writing.

The fast expanding body of literature in technical writing represented by primary materials such as books, monographs, journals, some reference guides and standards, including learned and professional bodies, education and training programmes, etc. are also briefly mentioned in this Unit.

1.2 COMMUNICATION

Communication, according to dictionary, is defined as:

- act or instance of transmitting;
- imparting or interchange of thoughts, opinions or information by speech, writing etc.;
- something imparted, interchanged or transmitted;
- document or message imparting information, opinions, etc.;
- process by which information is exchanged between individuals or groups through a common system of symbols, signs or behaviour.

These definitions imply that for information to be transmitted, it has to be first mentally conceived, generated or formed by an individual; only then can the information be communicated to another. The transmission process, could, however, be oral, through visual images or icons, or through written text in any language; or a combination of all these different modes of communication.

1.2.1 Oral Communication

Oral communication is a method of communication through speech. It is characteristic of its immediacy and personal touch which may be difficult to capture in other forms of communication. This is because, the physical senses like vision, hearing and touch can be used by the speaker as well as the listener. The tonal variations, volume of sound and its modulations, verbal expressions and the methods of rendering them etc. to emphasise a particular point of view, create a diversion of thought or force a decision, etc. on the listeners. In addition to these, there is very often an informal or flexible setting which lets the sender and the receiver interact with questions and answers, comments and response. And as all these take place at a given time, there is an immediacy in response and feedback.

Oral communication can either be direct or indirect. If an individual speaks to another person or a group of persons, face-to-face or through any media, it implies a direct approach to communication. Whereas when a message is transmitted through a person other than the originator of the message, to a particular person or group of persons, the communication is said to be indirect. An officer addressing his subordinates is an instance of direct communication. On the other hand, the top management of an organisation, issuing instructions through the line of managers to be communicated orally to the employees, may be regarded as indirect communication. Whatever the type of oral communication, the fact remains that this kind of communication permits an instant reaction.

1.2.2 Audio-Visual Communication

If oral communication is combined with visuals, the effectiveness of the message reaching the communicate tends to be more assured. Television programmes that combine oral and visual communication have a direct impact on the viewers, giving more credence and precision to the subject communicated, than a mundane oral speech, a formal lecture or reading a prosaic text.

1.2.3 Written Communication

Another form of transmitting and receiving information is the written form of communication. Although written communication does not have the quality of personal touch and immediacy of oral communication, it has its own advantages. It has an "at a distance" approach and probably because of this and other characteristics which enhance it, it can be far more effective than oral communication in certain respects. This mode of communication is discussed, in detail, in the following pages.

Self Check Exercise

1) Bring out the essential difference between oral, audio-visual and written communications.

Note:

i) Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

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1.3 WRITTEN COMMUNICATION

Some of the perceptible characteristics of written communication are that it :

- has a more formal perspective, suggesting greater authority and trustworthiness;
- can be a potential record, capable of extended life and of being used again and again;
- can be extracted in parts or portions and can be authentically quoted;
- is suitable for reading at an individual's own best reading time, speed and place; and
- is accessible to a large readership which can also lead to the benefit of expert criticism and review by peers.

These characteristics get further value-added, if the communication is written by experts and knowledgeable persons; the data included in such written communications and the statements made therein are likely to be perceived to be well thought out, valid and accurate.

So when you communicate through written texts, you should he able to make full use of all the advantages that go with written communication, hearing in mind that you don't have the advantage of oral communication. To compensate for the advantages of oral communication, experienced writers try to introduce through their writings an immediacy, personal touch and involvement through style, vocabulary and ton of writing, etc. to get a proper rapport with the audience.

Communication through writing is also of different forms, Writing can he creative or technical. Let us examine these forms in the next section.

1.3.1 Creative Writing

Creative writing involves a certain amount of, or a streak of creativity in an individual. In addition to a good command of a language (proficiency in vocabulary and diction) a creative

writer should have a flair for writing. A creative writer, applying his/her rhetoric abilities of using a language, effectively portrays a vivid picture of an event or activity (real or fictitious) in an imaginative style with a deep perception of the environment in which the event or activity takes place and the characters involved in it.

Good poetry, novels or short stories or other forms of imaginative writings, then would not be technical because they are built on intuition, feelings and imagination. High quality creative writings also lend themselves to various meanings and interpretations. Creative writing, therefore, is attributive of almost a spritual activity. Its purpose is not to inform but to reveal. A creative writer meditates either on concrete things of the world or on abstract thoughts like love or divinity and pours out his/her own feelings and emotions in the writing. While bringing his/her unique imagination into play, may interact with life around and write about social situations and events, so as to enlighten, uplift and transport, in a manner all his/her own - as in a novel or short story. One can sense the writer's individual vision and personality, perceptions and understandings in such writings.

1.3.2 Technical Writing

Technical writing unlike creative writing is not a reality but rather the recreation of what was once a reality, namely narrating a given job, to meet a social, economic, commercial or techno-economic need. Technical writing differs from other gen[r]es of writing in many ways. But the predominant characteristic that distinguishes technical writing from other expository writing is the reporting of technical data, which necessarily include tabular presentation of data, graphical representation and often photographs.

Technical writing, therefore, deals with ideas and situations; its intent and purpose are to inform; it adds to one's own knowledge and widens his/her perception of things. In the educational context, books on history, economics, science or technology, belong to this category. In order to achieve the best in the task of informing, the writer has to be analytical in his/her approach and present the arguments methodically and lucidly so that writing is easy to comprehend.

Although on the basis of subject matter, form and presentation, technical writings can be divided into creative and non-creative, it is not unusual that a highly imaginative writer can present a non-creative work in a creative manner. Conversely a technical writer can also produce a high quality creative work. Some of the best writers in science have produced works of great literary merit and imagination while presenting highly complex scientific and technical subjects.

Self Check Exercise

2) Distinguish technical writing from creative writing.

Note:

i) Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

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1.4 WRITING SITUATIONS

There are many writing situations. Most technical writings tend to be:

a) individual efforts, motivated by an inner urge to communicate on a subject of public importance; for living; mandatory or obligatory when tied down to certain tasks; compulsory as in the case of research scholars;

b) resultant of organisational activities in which individuals and groups may participate for instance in initiating a project proposal, reporting on the progress of a project at various stages or promoting a variety of products and services and so on.

So individuals have one reason or the other to write. For corporate bodies it is necessary to communicate their activities, for various reasons. Whatever be the writing situations, the focus is always on the audience for whom the writing is intended and the resulting product is also some form of document.

1.4.1 Individual Writing

Some individuals have a strong urge or emotion, driving him/her to express views on any aspect of an issue of public interest and importance. These views or opinions are usually expressed through newspaper articles, letters to the editor of newspapers, or publications. The writings may be relating to literary, economic, scientific, social, political or cultural aspects. Most of these types of writings are by persons who have the necessary subject expertise, writing experience and competence. Many of the writers are usually eminent persons or seasoned writers such as newspaper columnists, intellectuals of standing scientists, industrialists, public persons, artists, academicians and others.

1.4.2 Corporate Writing

Organisational writings are not voluntary efforts of individuals, although individuals do take part in such writings. These stem from organisational objectives and functions and are meant to support their executive performance.

We shall examine these types of writings from the requirements of a few typical organisations to illustrate this aspect of our study.

a) **Educational Institutions :** Writing situations in educational institutions arise out of the need to bring out course materials for learning and teaching. These course materials are designed according to the levels of teaching and learning in different subjects. Textual information is presented with well-thought-out illustrations to enable students to learn with ease. Teaching aids to instructors are also prepared to help teaching and other pedagogic functions of teachers. Self-taught guides of quality are also prepared to aid self learning. All these writing efforts take the form of text books, reference guides, work books, practical manuals and others. Teachers usually prepare such course materials.

   Persons involved in educational research are engaged in investigations and field studies and bring out research papers, special reports for educational planning, curriculum development, and others. The target audience for such publications are teachers, educational planners, implementers, administrators and various other categories of executive officials.

b) **Research Complexes and Learned Societies :** Most complexes of research establishments, learned societies and professional associations have responsibilities for specific areas of research and development. Particularly in applied research and development, research efforts are geared to achieve targets in scientific, industrial and economic growth, technological innovations, market research, etc. with an orientation towards social goals. These research efforts are related to the country's development planning and growth targets.

   The outputs of these organisations appear in the form of research papers, research/technical reports, various forms of promotional literature with reference to technology transfer from

research to commericial organisations for exploitation. Marketing of technologies developed by these research institutions have become increasingly necessary to sustain indigenous research.

Persons with high qualifications, experience in different disciplines of science and technology and related social sciences like economics, sociology, are involved in these R & D activities. They publish different types of documents resulting from their research efforts.

c) **Government :** Today governments of almost all countries are the most prolific generators of information, the largest publishers, and also the biggest consumers of information. In fact, there is no public activity in which the government has no direct/explicit/implicit involvement, concern or connection.

Through the three organs of the government machinery, viz., legislature, executive and judiciary and their respective numerous agencies, the government performs its functions and operations. In the performance of these tasks, every one of these agencies, brings out its own publications. Almost every conceivable type of publications emanate from these government agencies.

The target audiences are also diverse individuals and groups. They range from common lay persons to highly sophisticated bureaucrats and specialists. The major functions of these publications are to inform, instruct, direct, convince, persuade, impel, induce and compel, depending upon the prime purpose of the document.

Almost every category of writers with different specialisations serve the government in all their publication activities. These persons bring out plan and policy documents, a variety of reports, other specialised publications, legal and regulatory documents and a host of other publications.

d) **Mass Communication :** Unlike writing emanating from the corporate bodies mentioned in the foregoing section, no information is actually generated by institutions of mass communication. They however, report on current events, activities and persons involved in them. In addition, they carry news analysis, comments and reviews, feature articles on every subject and topic of public interest, besides editorials that express the views of the newspaper on issues that concern the public and country.

The channels through which current events and activities are reported are not only through the conventional paper-print media, but also through broadcasting and television. In recent decades, video magazines are supplementing and complementing newspapers in capturing events of historical significance and importance.

Public relations and advertisements also are deemed to be the province of mass communication today. They are not media in themselves; instead they serve as facilitators of the mass media. In other words, public relations and advertising contribute in substantial measure, directly or indirectly to the cost of disseminating information cheaply to large audiences. Undoubtedly this introduces a new dimension in mass communication.

Although the prime time in broadcasting and television is given to entertainment and reporting news on current events and activities, every subject of public interest is communicated in modern television networks through their multiple channels to cater to different interest groups.

Advances in information technology, offer almost unlimited scope for mass communication through the integration of textual, audio and visual information. Although this integration is in its embryonic stages of development, the possibilities of ushering in new and most powerful means and methods of communication are likely to emerge in the near future which will have far reaching implications to societal changes.

Persons involved in mass communication, as of today, are mostly the traditional class of journalists with different specialisation, largely associated with the print media. But the writing required for broadcasting, television, cable TV and videos, public relations materials and advertisements are opening up new avenues for a new class of script writers.

The target audience in mass communication is lay persons and non-specialists. But mass media being a powerful shaper of public opinion and considered the fourth estate of a democratic set-up, readership and viewers constitute the entire population, having a choice to read or view or hear anything of their interest.

1.4.3 Office Communication

Cutting across all corporate bodies, a common writing situation is the requirement of office communication for internal administration and management and to maintain external relations. Inter alia, office communications include:

- letters and correspondence,
- office memoranda,
- personnel evaluation reports,
- statement of internal plans and policies,
- annual administrative and financial reports,
- agenda and minutes of statutory committee meetings,
- briefing documents,
- house bulletins/newsletters,
- discussion papers on official policies and procedures,
- employee unions/management meetings,
- profiles of individuals,
- dosiers, and
- circulars.

In the preparation of above documents, language, writing styles, emphasis on contents, tone of writing, etc. usually vary from organisation to organisation, although there are certain common elements. Many of these writing tasks are generally entrusted to senior and experienced persons in organisations who have the necesssary background, writing skills and ability to ensure support to the top management, and to establish better relationship among different categories of personnel. A large part of these documents will eventually go to the archives of organisations for storage and preservation for access or retrieval to meet any need for them in the future.

1.4.4 Oral Presentation

Oral presentations, such as speeches, talks, lectures, etc. have to be supported by written materials of quality to carry the audience with the speaker. Preparation of presentation materials is as important as effective oral presentation. Flipcharts, transparencies for overhead projectors, slides, leaflets, booklets, special brochures and other supporting materials have to be prepared with great care and thought. Brevity, simplicity and relevancy, in matching these materials to appropriate positions in the talk, would ensure success. Writing skills of a special types are required in the preparation of these materials.

Self Check Exercise

3) What motivates individuals to write?
4) What are the similarities and differences between writing situations in R&D institutions and industry and business.
5) Distinguish the writing situations in government from mass communication.

Note:

i) Write your answer in the space given below.
ii) Check your answer with the answers given at the end of this Unit.

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1.5 PRESENTATION AND PRODUCTION

What is effective presentation of a written technical communication? It is one that :

a) is clearly organised;

b) engages/arrests the attention of readers throughout;

c) provides appropriate descriptions and explanations with illustrations and examples; and

d) ultimately gives the readers a memorable and positive experience.

If these are the basic objectives of a written technical communication, then the effectiveness of it is determined by:

a) writer's unambiguous understanding of readers to whom the writing is meant for and the purpose of writing;

b) an abiding interest in reading, general as well as specialised material, relevant to the areas of work of the writer;

c) quality of contents in terms of authenticity, reliability, authority, adequacy, currency, etc.;

d) structural organisation of contents in terms of logical arrangement of themes and sub- themes of contents, dividing them into sections and sub-sections with main and sub-headings;

e) putting the organised contents into a language which presents the ideas with clarity and lucidity, supported by illustrations and examples; and

f) physical production of resulting final draft of the manuscript in terms of readability, print aesthetics (if the document is printed), positioning of illustrations appropriately to go with the textual matter and other related aspects.

1.5.1 Quality of Contents

Quality of contents of a technical communication is ensured if the writer:

a) has a good background of the subject on which he/she writes;

b) keeps abreast of the latest developments in the subject, in addition to having a good acquaintance with the literature of the subject;

c) has a good grip over the techniques of gathering data and information from primary, secondary and tertiary sources of information;

d) has an intimate understanding of the level at which the writing has to be presented to the satisfaction of his/her target readers.

1.5.2 Structural Organisation

Another important element that ensures quality is the structural organisation of the contents which means, arrangement of data and information collected on the subject, in a logical/helpful sequence, breaking them into meaningful blocks and sections for easy comprehension of readers.

Depending upon the purpose of writing and the nature of contents, organisation and design of the presentation of ideas and thoughts into logical blocks, also greatly help the writing process.

Structural elements for this Unit given at the beginning, are a model for the writing process in the preparation of educational course material on a given topic. Another example of a typical outline of a proposal, indicating the structural organisation is given below:

Introduction - Problem, objectives, advantages.

Body - Description of the technical plan; What is to be done? How? What outcomes are expected?

- Management plan: Personnel, facilities, budget evaluation.

Conclusion

Structural outline gets modified at any point while fleshing each element in the outline, with appropriate ideas. Initially not much attention is paid to the language of presentation; but once all the ideas get into their right places in the draft, full attention is given to grammar, diction, clarity of ideas and thoughts, lucidity of expressions and other related aspects.

Editing of both contents and language, shapes the write-up into a form that adds further quality. Expert editors invariably add value even to a mediocre draft.

1.5.3 Physical Production

Once the final draft of the manuscript is ready, the physical production of the document is taken up. This involves three operations, viz.,

a) composing the matter,

b) page layout of composed matter, and

c) printing.

a) **Composing :** Advances in information technology are changing the writing and publishing scenario considerably. The emergence of personal computers, word processing softwares, desktop publshing, etc., have virtually enabled a writer to become a publisher. The outcome of these facilities brings in amazing speed in the processes of composing, layout and printing that also ensure excellence to the quality of the outputs.

The standard features of most word processing software packages are with reference to text formating and text editing. The former provides for setting left and right margins, line spacing, justification, page size, page numering, centered headings, etc. The latter facilitates deletion of single words, or blocks of texts, trader of words and texts to other points within the document, appending text from a floppy file, insertion of new text, global search and replaces all occurrences of one word with another, and easy movement backwards and forwards in the text.

Advanced word processing software packages handle graphic images, spell checks, thesaurus consultation, indexing, calculations, etc. Top range softwares such as Word Perfect offer features close to desktop publishing, in addition to all the above features.

b) **Page Layout of Composed Matter** : Desktop publishing (DTP) is a comparitively recent concept, born on the Apple Macintosh (an extremely user friendly computer system) that enables documents to be produced with a quality approaching that of documents produced by professional printers. An important feature of DTP is that it is necesssary to consider the computer software packages which will be used to manage or create the data to be printed, as well as that used to make up the page layout of the final document.

Word processors, spread-sheets and Database packages, are therefore essential parts of DTP depending precisely on what has to be printed.

c) **Printing :** The choice of computer printing depends, in part, on the quality of output required. Laser printers are the best choice. Expensive models of laser printers provide for storage for a range of founts and type points for the English language and Roman script. Some software packages provide founts in many different languages and scripts.

A scanner can be used to capture data from the printed page, and images can be incorporated from video sources. Characters can be analysed and recognised by optical character recognition (OCR) equipment, while captured images can be processed in a variety of ways.

For large scale printing, of course, the offset printing technology and machinery would have to, be used.

Self Check Exercise

6) State the essential factors contributing to effective presentation of technical communication.

7) State briefly the different aspects of physical production of printed documents.

Note:

i) Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

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1.6 TECHNICAL WRITING SKILLS FOR INFORMATION PROFESSIONALS

The expanding library and information systems, services and management, call for writing skills of the highest quality. We may examine the writing skills necessary with reference to three writing situations for library and information professionals. These are for:

a) individual professional development;

b) organisational requirements; and

c) professional services.

1.6.1 Individual Professional Development

Writing skills for library and information professionals should perhaps start and be cultivated from the beginning of their professional education and training. Writing practices should commence at the professional schools from writing assignments, term papers, etc., gradually to project reports, theses and dissertations. These preparations would stand by them very considerably when they get into information institutions to take up responsibilities. Other professional skills being equal, persons with communication skills are always conspicuous in an organisation. Proficiency in technical writing skill would get them greater chances of rising up in their careers.

This skill should be continually upgraded during their professional careers so that they could write on any topic with greater ease and speed, irrespective of the nature of technical documents that have to be prepared and produced. Acquisition of such skills would also be a life long asset.

1.6.2 Organisational Requirements

In any organisational management, there are invariably many writing situations to bring out various kinds of documents through which the organisation promotes its interests and tries to achieve its targets and objectives. Libraries and Information Centres are no exception to this. Almost every one of the types of documents calling for different writing skills required for office administration and management, as mentioned in section 1.4.3 (Office Communication) would be needed in libraries and cognate bodies. Individuals who have obtained skills in technical writing would always be on demand to do this kind of work. Combined with other forms of oral and visual communication, the opportunity to raise the image of the organisation would be immeasurable, assuming that the organisation has been performing with great efficiency.

1.6.3 Professional Services

With the increasing application of computer and communication technologies to various functions in libraries and information institutions, the housekeeping operations are getting organised, sparing valuable time for professionals to attend to many intellectual operations and services. Library databases are becoming more versatile, providing scope for innovative user services. The full use and exploitation of the collections in libraries is becoming possible. The effect of all these developments provide opportunities to professionals to devote their time to intellectual efforts of condensation, consolidation and repackaging services. New services in which information professionals work closely with users at different levels are not only innovative in nature but also highly user-friendly. These professional services can be accomplished well only with technical writing skills. Condensation services include preparation of abstracts, summaries, digests,$_{c4}$synopsis and other type of epitomisation of lengthy articles, research papers, reports, etc. Consolidation service involves preparation of descriptive and critical reviews, state-of-the-art reports, trend reports, and the like which give a consolidated and rehashed account of developments in a given field, through careful selection and evaluation of macro and micro documents already published. These types of services require not only a good subject background but also abilities in technical writing.

All types of writing skills discussed in the foregoing sections of this Unit will be very relevant to library and information professionals.

Self Check Exercise

8) Describe some of the library and information services which call for writing skills.

Note:

i) Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

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1.7 LITERATURE ON TECHNICAL WRITING

In recent times technical writing is emerging as a new discipline in its own right. Some of the criteria that give recognition to a new discipline are: (i) growing body of literature in the subject arising as a result of study, research, and field experience, (ii) appearance of primary periodicals, (iii) establishment of learned and professional societies and associations, increasing membership in these, (iv) education and training programmes offered by institutions and experts in the field, and (v) national and international conferences to discuss new problems and giving directions to further research, etc. also help in making technical writing a new discipline. Judging on the basis of these criteria technical writing is indeed a new and emerging discipline.

This section sketches a few developments in literature growth in technical writing, institutional and professional activities, publications and others to give a glimpse and emphasise the importance of acquiring a working knowledge of information resources available in technical writing.

There has been a steady growth of books, monographs, conference papers and proceedings, guides, standards and manuals, glossaries, bibliographies and other forms of publications in technical writing. The titles given in References and Further Reading section of this Unit, gives a number of references which throw light on the different sources of information on different facets of technical writing. The more important aspects appear to be, basic principles, methods, mechanisms and process of technical writing in general and in particular with reference to various types of writing situations. Reader analysis and feedback to certain types of writings, linguistic aspects, editing, etc. also get full attention in most books.

Two well-known journals in technical writing are *Professional Communication,* published by IEEE transactions, and *Technical Communication* brought out by the Society of Technical Writers. These two carry research papers and review articles, book reviews, conference proceedings (issued as their special numbers), besides other information of general interest to professional writers.

Professional societies and associations have come up at the national and international levels, holding periodic conferences to exchange professional expertise, experience, ideas and thoughts, in addition to activities relating to professional matters.

Short and long term professional training courses are offered by professional and learned bodies, and also by organisations specialising in publishing. In India the Publications and Information Directorate (PID), a constituent of the Council of Scientific and Industrial Research, has been the pioneer in offering short courses in science writing. INSDOC and DRTC have been offering a paper in technical writing in their professional courses in Information Science. Society for Information Science also offers short courses in technical communication under the auspices of the NISSAT programmes. National conferences and seminars have also been organised by these organisations and these have all come out in the form of publications.

It is in the primary interest of library and information professionals to get fully acquainted with all the aspects of technical writing.

Self Check Exercise

9) Give a brief account of technical writing literature.

Note:

i) Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

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1.8 SUMMARY

This Unit gives a quick overview of technical writing which includes:

- basic differences between oral and written communication;
- distinguishing characteristics of creative writing and technical writing;
- varying writing situations with examples of writing skills required in education, research, industry, and business, and mass communication;
- technicalities of presentation and physical production of documents, particularly with reference to printing;
- writing skills to be obtained by library and information professionals; and
- a quick sketch of literature of technical writing that includes professional jouirnals, learned and professional societies, training programmes, national and international conferences of professional writers, etc.

1.9 ANSWERS TO SELF CHECK EXERCISES

1) Oral communication is a method of communication through speech. It is characteristic of its immediacy and personal touch as' it takes place at a given time. Therefore, there is very often informal and flexible setting which lets the speaker and the receiver interact with each other with questions and answers, comments, response and feedback.

   Communication recorded in a formal manner can be called written communication. Although it cannot have the immediacy and personal touch, it (i) has a greater trust-worthiness, (ii) can be used again and again, (iii) can be extracted, and (iv) permits a reader to read at his own best reading time, speed and place. Readership can be large which can lead to healthy criticism and review.

2) Creative writing involves a certain amount of, or a streak of creativity. It is built on institution, feelings and imagination. Its purpose is to reveal and not to inform.

   Technical writing unlike creative writing, is the recreation of what was once a reality, namely narrating a given job to meet social, economic, commercial or techno-scientific need. Most technical writing is characteristic of presentation of information, experimental

or observed data with descriptions and explanations, interpretations and conclusions, supported by graphics.

3) Individuals are motivated to write a) by an inner urge to write on a topic of public interest or importance; b) to make a living; c) because it is mandatory or obligatory of job requirements; and d) because compulsory as in the case of students and research scholars.

4) Research institutions are primarily concerned with the dissemination of their research findings and results through research articles, research reports and the like. Whereas business and industry are involved in manufacturing with commercial motivations of selling a product or a process. Therefore their interest in technical writing would be related to their primary objectives. But if industrial undertaking are also involved in research and development, in addition to their commercial activities, the R & D personnel would also bring out journal articles, research and technical reports such as in R & D institutions.

5) Governments are involved in a variety of activities which necessitates them to inform, instruct, order, and persuade its citizens to run the state administration in all its dimensions. It may also include mass communication functions. But in mass communication, the main function is to report current events and activities, and publish news analysis with commentaries or criticism. Since the fundamental role being different, their writing situations also would be governed by their primary objectives.

6) Essential factors contributing to effective presentation of technical communication are: a) a thorough understanding of the readers to whom the writing is meant for; b) an abiding interest in reading; c) quality of contents in terms of authority, authenticity, reliability, relevance, etc.; d) structural organisation of contents; e) language of presentation in terms of grammar, diction, clarity, lucidity, etc.; and f) quality of physical production.

7) Aspects that give quality to physical production of printed documents are a) composing using modern word processing software packages; b) page layout and design using DTP; c) printing through laser printers.

8) Skills in technical writing are essential in providing condensation, consolidation and repackaging services in libraries and information centres. Besides these, the requirements of management would call for technical writing skills in office communication.

9) Literature on technical writing includes books, monographs, guides, standards, primary periodicals, conference papers and proceedings, etc. Besides institutions that are responsible in the production of literature are learned bodies and professional associations which hold periodic conferences to discuss various problems of subject development. Education and training programmes prepare persons to become professionally qualified and competent in technical writing.

1.10 KEY WORDS

Corporate Writing: Technical writing in corporate bodies such as government and its agencies, institutions, learned societies, professional associations and others.

Creative Writing: Writing that is built mainly on intutition feelings and imagination. The writers in this area should have a flair for writing.

Desktop Publishing (DTP) : Publications using computer software packages to manage or create the data to be printed, as well as that used to make up the pages of the final document. Word processors, spreadsheets and database packages are, therefore, an essential part of DTP. As most routine publications can be produced literally on the top of a desk using a computer, it is known as desktop publishing

Mass Communication : Communications that are produced for the masses, such as news-papers, broadcasting, etc.

Mass Media : Mass communication channels such as print, audio-visual and electronic media.

Office Communication : Written communication pertaining to office administration and management.

Oral Communication : Method of communication through speech.

Technical Communication : Communication that relates to a subject, written for a targeted reader, for a specific purpose.

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UNIT 2 CHARACTERISTIC FEATURES OF TECHNICAL WRITING

Structure

2.0 Objectives
2.1 Introduction
2.2 Classification of Technical Communications
2.3 General Characteristics of Technical Writing
2.4 Characteristics of Types, Relevant to Library and Information Field
- 2.4.1 Professional Writings
- 2.4.2 Proposals
- 2.4.3 Plans
- 2.4.4 Reports
- 2.4.5 Instructional Materials
- 2.4.6 Professional Services
- 2.4.7 Correspondence

2.5 Oral Communication
- 2.5.1 Presentation Materials

2.6 Summary
2.7 Answers to Self Check Exercises
2.8 Key Words
2.9 References and Further Reading

2.0 OBJECTIVES

After reading this Unit, you will be able to:

- classify written communications using appropriate characteristics to divide them into many useful groups;
- get a good insight into various writing situations relevant to library and information professionals;
- grasp the essential characteristic features of technical writing to identify specific types;
- obtain a working knowledge of designing structural outlines for specific types of technical writing; and
- understand oral presentation supported by carefully designed written materials.

2.1 INTRODUCTION

The first Unit of this Block presented a bird's-eye view of the different facets of technical communication. This Unit presents various forms of technical communications, using a few relevant characteristics to identify them. While there are general characteristic features common to all categories of technical writing, specific characteristic features reckon the different ones. This reckoning might help the preparation of structural outlines for each of them.

Library and information professionals have to be familiar with a number of writing situations, both in the management of information institutions and in offering professional services. These types of writing situations are illustrated with examples of outlines for each one of them, identifying their specific characteristic features. This type of designing outlines would give you a good practice to prepare such outlines to any specific writing material that is to be written.

Oral presentations have to be invariably supported by carefully designed written materials. This Unit tries to illustrate a few examples of presentation materials to support oral communication.

2.2 CLASSIFICATION OF TECHNICAL

COMMUNICATIONS

Classifying written communication into various categories would be a useful exercise because it helps to analyse and identify the characteristic features of various types of written documents. There is, of course, no single characteristic or a single set of characteristics that can classify all written communication to serve every purpose.

Categorisation of technical communications is shown below:

i) Division by function

a)	Proposing what one wants to do:	Proposal for new projects, new methods and materials, Research problems, etc.
b)	Recording setting down details of an action, decision plan or agreement	Minutes of meetings, business agreements, transactions;
c)	Reporting Routine periodic:	Organisation/institution reports (annual, half-yearly, etc.), progress reports;
	Inquiry	Surveys, investigations, experiments, tests, research, etc.;
	Informing	Information bulletins, literature reviews product descriptions process explanations;
	Recommending	Commission Reports;
	Suggesting action	Committee Reports;
d)	Persuading urging conclusions, convince purchase, etc.)	Construction bids, grant applications, an action, influence a advertisements, business promotions; and
e)	Training/instruction	Course materials, reference guides systems manuals, user manuals;

ii)	Division by type of documents:	Research papers, professional writings, instructional materials reference, materials, bibliographical tools, reports, periodicals, regulatory and legal documents, newsletters/house journals, and such other primary, secondary and tertiary materials;
ii)	Division by readership:	Professional peers and colleagues, business persons, industrialists, academiacians / scholars, bureaucrats/ govt. executives, general public

The above groups are not mutually exclusive. They indeed overlap very much. They are, however, grouped here only to help us to identify the distinct categories of each one of them. The purpose is to aid us in the formulation of structural designs for each of them that would go a long way to prepare written drafts.

Self Check Exercise

1) State a few reasons for classifying technical communications.

Note:
i)) Write your answer in the space given below.
ii) Check your answer with the answers given at the end of this Unit.

2.3 GENERAL CHARACTERISTICS OF TECHNICAL WRITING

In this Unit, by characteristic features of technical writing, we mean the structural elements or components of different types that distinctly mark them. There are some general characteristic features that are common to all of them. There are also others that are unique to each category. We shall examine both these features.

In Unit 1, we distinguished creative writing from technical writing. We noted that technical writing invariably

a) deals with a subject or a topic;
b) addresses a specific target group;
c) presents the contents in a language that is oriented towards a target group;
d) presents the write-up in a form, supported by well designed illustrations and photographs wherever necessary, to draw attention of the target group; and
e) gets printed attractively, if the document is brought out in a paper-print mode; gets appropriate formats if brought out by any other mode.

These characteristic features can he attributed to any type of technical writing. The different categories of technical writing mentioned in section 2.2 of this Unit, however, have their distinct characteristic features which would identify them from others. Let us examine these distinct characteristic features of a few illustrative categories which are relevant to professionals in the Library and Information Science discipline.

2.4 CHARACTERISTICS OF TYPES, RELEVANT TO LIBRARY AND INFORMATION FIELD

Effective written communication skills are one of the most essential requirements of a library and information professional, as these professionals are basically communicators. It is not an overstatement to say that without these skills, advancement to the top positions in this field would be rather increasingly difficult in the changing and expanding dimensions of Library and Information Science. These aspects have been sufficiently emphasised in Unit 1 of this Block.

Many of the writing situations discussed in Unit 1 of this Block also are relevant to the Library and Information field. However, this Unit picks up a few typical ones to discuss

their specific characteristic features.

2.4.1 Professional Writings

Professional writings take, usually, the form of research/technical papers/articles, investigative reports, survey of literature, review articles, and such others. Many of these get published in journals, conference proceedings and in other periodical publications. Some are brought out in the form of independent reports or monographs.

The primary purpose of these communications is to inform or record the findings of an investigation which can be accepted by the peers with changes and modifications, if necessary, and to be incorporated into the pool of knowledge in that discipline. Sometimes they may serve as useful training or instructional materials and/or may also help decision making processes. Hence care has to be taken in planning and preparing such documents. Good quality publications get the author not only professional recognition but also raises his standing as an accomplished communicator. Besides, a properly prepared paper, intended for publication in a reputed journal, gets acceptance promptly after going through the rigorous procedures of refreeing; and goes into print without much delay. Professional contributions of quality are keenly awaited, and read with interest, and the user community is benefited.

The hall marks of a good quality technical communication are:

- objectivity,
- accuracy and authenticity of technical content,
- clarity of presentation,
- brevity,
- consistency and precision, and
- good physical production

These hall marks have to be reflected in all the elements of a technical communication.

The characterisitc features of a research or technical paper, viz. the tile, abstract, introduction, body of the text, presentation of results, discussion, conclusions, summary, etc. should vouchsafe for quality. Names and addresses of authors, literature citations, professional jargons, etc. should conform to professional standards to meet their different functions.

Literature surveys normally reflect the following specific characteristic features:

i) careful selection of primary, secondary and tertiary sources for consultation;
ii) selection and evaluation of individual contributions;
iii) expert analysis of contents, with proper judgement in interpretations to indicate trends;
iv) summary and conclusions; and
v) bibliographical references.

Similarly other primary contributions in professional writing select appropriate features and elements that would portray the study dispassionately and objectively.

Self Check Exercise

2) State the general characteristic features of technical communications.
3) Identify some of the specific characteristic features of a review article.

Note:

i) Write your answers in the space given below.
ii) Check your answers with the answers given at the end of this Unit.

2.4.2 Proposals

Proposals differ from other technical writing in that they deal with the future i.e. action to be taken, rather than with events that have already occurred. Proposal is one of the most important type of technical writing that most professionals may have to prepare at different stages in their career. Regardless of the environment in which a person functions, proposals may have to be written to get projects and programmes, obtain contracts, change a career position, and improve professional prospects.

A proposal is a written statement of i) intention, ii) willingness and iii) qualifications and expertise to accomplish a particular task within a given time frame. The most important function of a proposal is to convince the peers to win approval and get financial and other support for tasks, that the proposer wants to take up.

A proposal may be internally generated and addressed to the top management to get approval and funding for a new product development or a service (a current awareness service in a newly developing discipline, or preparation and production of a directory). It may be to a funding body to get approval and financial sanction for a research project on information market development for a document delivery system in an organisation. Proposals may also have to be prepared on the basis of a request from sister institutions or national funding bodies for any specific area of professional work. They generally identify problems, suggest a solution and indicate specifically what the proposer wishes to accomplish. Proposals generally have the following components:

- **Letter of transmittal:** A formal proposal is always accompanied by a letter which usually identifies and highlights the problem, and offers to work on it on mutually agreed conditions.

- **Title page:** This gives a succinct statement of the problem, name of the organisation to whom the proposal is submitted with an identiyfing number, date of submission and the period during which the work would be completed, etc.

- **Executive summary:** This is a brief summary of the total proposal. Busy executives seldom find time to go through detailed text of a proposal but they are the ones that approve and sanction funding. Hence the executive summary needs to be carefully drafted to get a favourable response.
- **Table of contents:** Any proposal having more than five to six pages should have a table of contents.
- **Statement of request:** If the proposal is in response to a request, the statement of request is sometimes given, which may include the terms of reference.
- **Introduction:** It should include an elaborate statement of the problem and its background. The scope of the proposal has to be spelled out.
- **Methodology:** This explains how the work is to be accomplished and hence is perhaps the most important section of the proposal.

- **Facilities:** The facilities required to execute the task have to be stated unambiguously to avoid any problem at later stages. These may include equipment and machinery, literature support, transport and communication and such others.

- **Personnel:** This includes professionals, secretarial staff, their quality and number, depending upon the nature of the project.

- **Duration:** It should indicate milestones, phases and completion of the task.

- **Cost:** This is crucial. It includes salaries, capital expenditure, if any, expendable equipment, miscellaneous expenses and overheads.

- **Summary:** Busy executives would also read the summary and conclusion to assess the proposal and hence should be written with utmost attention.

Proposals can vary widely in form and contents. A number of factors, like solicited/ unsolicited, formal/informal, internal/external, influence the writing and presentation of proposals. The characteristic features given above should serve as a useful guide in general for writing the proposal.

Self Check Exercise

4) Outline the characteristic features of a proposal, offering yourself for a executive position in a information business concern.

Note:
i) Write your answer in the space given below.
ii) Check your answer with the answers given at the end of this Unit.

2.4.3 Plans

A plan is a well thought out and designed document of an activity or a set of activities, complete in all aspects. It provides a framework to set objectives and outline the way the targets are to be achieved, marshalling human, material and financial resources. Planning is an analytical process involving:

- determination of desired goals, objectives, and set targets of achievements within a time span in a phased manner;

- assessment of future in relation to environmental changes, professional trends, technological advances, and the influence and impact on all aspects of developments;

- selection of activities, programmes and projects to accomplish goals and targets set, from among the alternatives available, and fixing priorities;

- estimation of resources required in terms of finance, equipment, manpower and other physical resources;

- preparation of a written plan document; and

- provision of an action plan for execution.

In short, a good plan is a blueprint for action. It anticipates problems and suggests methods and strategies to overcome them. It is flexible enough to modify at different stages of implementation and helps the achievement of goal and targets prudently and economically.

In organisations and institutions, planning is generally a corporate activity, involving senior officials and executives. But the drafting of the plan may be entrusted to persons who may have writing skills and abilities.

Plans may relate to the entire organisational development with a short or long range time frame, or specifically with reference to an activity. But the broad characteristic features could be more or less the same, although the contents and methodology could be different.

The characteristic features of a plan for library automation of a medium size library, specialising in a set of new disciplines, may be as follows:

- A vision of the future of the library in terms of users, collection development, database creation and maintenance, new and innovative services, and human resources development - in general to derive all advantages of library automation;
- A design plan in which all aspects stated above are spelled out in detail, with reference to library's current status and inputs needed;
- An operational strategy to evolve a pragmatic method and to apply it in a phased manner, identifying milestones and specific targets to fit into achievable time frame;
- Identifying every component of the operational strategy, and estimate requirements in terms of quality and quantity; and
- A workable management strategy to deal with transitional problems.

The drafting of the plan document is a highly skilled activity which not only takes care of every idea in library automation but presents the marshalled data and information most effectively. These skills in writing have to be cultivated and the expertise has to be acquired with considerable practical involvement in writing over a period of time.

Self Check Exercise

5) Outline the characteristic feature of a plan for retrospective conversion of your library catalogue.

Note:
i) Write your answer in the space given below.
ii) Check your answer with the answers given at the end of this Unit.

2.4.4 Reports

Next to correspondence, reports are the most frequently written documents in an organisation. There are many types of reports to serve specific purposes. Most commonly, reports :

- inform readers about an organisation's activities, programmes, and plans so that readers are up to date on the current status (periodic routine reports);
- record results of an inquiry or investigation on specific aspects of a problem with recommendations for future reference for decision making or for any action (committee/ commission reports); and
- determine the feasibility of an undertaking to plan an activity.

Reports may vary in length, depending on the topic or purpose; they may be informal memos, formal reports, sometimes running into multivolumes. The readership may also range from a single individual to multiple readers with different purposes. Whether or not a report is short or long, its use depends on how much information a reader needs for a particular purpose in a specific situation, on the subject or the format of the report.

Inter alia, the technical report requires:

- **Letter of transmittal:** For formal reports, a letter of transmittal is often required to detail the terms of reference and such other data.
- **Title page:** It gives the first contact with the report and its character of the report. Usually contain the name of person/corporate body to whom it is submitted; writer's name, date, etc.
- **Executive summary:** The entire report is presented in a highly condensed form, an essential requirement.
- **Table of contents:** Seeks out the structured pattern of the report, indicating the relationship between the main and subordinate units.
- **Introduction:** States the subject of the report, scope, purpose and plan of treatment.
- **Preliminary section:** Gives a fuller development of the results of study, conclusions and recommendations;
- **The body:** Contains the procedure, equipment used for the study, results, analysis of results, discusssion, conclusion, and recommendations which logically follow from the conclusions. The text may be supported by charts, tables, diagrams, drawings, and photographs;
- **Summary:**
- **Bibliographical references**
- **Appendix:** Incorporates information which could not be presented along with the body of the text, such as detailed statistics and other items.

Self Check Exercise

6) Give an outline of the components that should feature in an annual report of a library.

Note:

i) Write your answer in the space given below.

ii) Check your answer with the answer given at the end of this Unit.

2.4.5 Instructional Materials

Quite often library and information professionals are involved as resource persons or faculty members of professional training courses, short or long term programmes. Formal oral presentations also are invariably required to be supported by written materials.

Libraries and Information Centres are expected to provide guides, and instructional manuals to their products and services for users to facilitate use of these products and services optimally.

With the increasing application of Information Technology to the Library and Information field, users' guides have become absolutely necessary for the effective use of software packages. At present computer professionals are involved in the preparation of users' guides besides system operation guides. This activity is generally referred to as documentation in computer parlance. While the guides to system operation software could be expected to be done well by computer specialists, the user guides particularly for library and bibliographic software could preferably be written by professional experts. This calls for special writing skills which will have to be acquired by library and information professionals.

While the characteristic features would vary from subject to subject and course to course, the structural outline of a unit of a course, for example, on "Computerised Cataloguing and Searching Techniques" would include:

- Objectives of unit which should be oriented towards students' learning objectives;
- Introduction giving a plan of thematic presentation of the topic;
- Ranganathan's five laws;
- Changing role of the library;
- Library catalogue in the changing context;
- Computerised catalogues and cataloguing;
- Networks, interlinking, dispersed access, online access;
- Descriptive cataloguing: bibliographic formats;
- Subject searching strategies and techniques;
- Shared cataloguing;
- Management issues;
- Summary;
- Keywords;
- Self check exercises and answers;
- Further readings; and
- Appendix.

Self Check Exercise

7) Prepare a structural outline of a course on collection development.

Note:

i) Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

2.4.6 Professional Services

Writing skills are necessary in library and information services for :

- Condensation preparation of abstracts, synopsis, digests, summaries, etc.;
- Consolidation preparation of trend reports, state-of-art reports and the like;
- Repackaging preparation of condensation and consolidation materials, orienting towards specified categories of users;
- Preparation of promotional booklets, brochures, charts, writing scripts for video presentation of library and information services and the like;

- Writings required for consultation services;
- Writings required for involvement in activities organised by national and international professional associations.

Writing skills required for these professional activities may overlap with some of the skills already outlined or described in the previous sections of this Unit. The point to be noted is that writing skills have become indispensable for many activities in Libraries and Information Centres. The conscious realisation of this and acquiring the necessary skills would greatly enhance professional prestige and status.

Self Check Exercise

8) Prepare a synopsis of a library brochure for the use of research scholars.

Note:

i) Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

2.4.7 Correspondence

Correspondence here refers not to the routine internal and external correspondence involving rules and procedures of administration, most of which are stereotyped and operated largely through already set forms and methods. There are, however, many situations wherein writing skills are required for preparing internal memos, circulars, agendas for important organisational meetings, for negotiating terms and conditions with external agencies for specific activities, programmes, etc. With the increasing emphasis on participative management culture, professionals at many levels have to get involved in such activities. Here again there is a need to get the skill in the preparation of these types of correspondence.

Correspondence generally includes letters and memos. Although these frequently are addressed to one person, they often have multiple readers because the senior to whom it is addressed passes the correspondence down the line of employees in the organisation either for information or joint action. Letters and memos are versatile written documents that serve many purposes.

Letters are written primarily to persons outside an organisation and cover a variety of situations such as a) requests; b) claims; c) complaints and adjustments; d) enquiries and response to enquiries; e) sales; f) credit; g) urging actions to solve a particular problem; h) goodwill messages; i) announcements; j) records of agreements; k) follow-up to telephone conversations; 1) transmittals of other technical documents; and m) invitations.

Memos are written primarily to persons inside an organisation. Many internal reports, such as deputation reports, progress reports and short proposals may be in memo form.

There are no specific formats or methods characterising the features in writing letters and memos. Each writing situation would have to be handled with a complete understanding of the problem and the concerned subject and the objective to be realised. It is however, to be

realised that this kind of writing also requires writing skills that should be acquired with experience.

Self Check Exercise

9) Write a letter to a computer company seeking their assistance in automating your library, specifying your requirements.

Note:

i) Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

2.5 ORAL COMMUNICATION

Everyone involved in a technical field will, on many occasions, be required to present information in discussions, meetings, arranged lectures, speeches and talks. Oral communication, if it were to be effective, will have to be prepared well in advance, with visual supports. Generally, oral communication serves the purpose to inform, persuade or instruct the listeners.

It is said that any audience absorb only *30%* of the information presented orally, the remaining 70% goes unregistered. It might be possible to reverse these percentages, if oral presentations are made with effective written presentation materials or visual aids.

2.5.1 Presentation Materials

Presentation materials mean all written texts which include, main points to be highlighted in an oral communication, statements that should catch the attention of the audience; tables, graphs and other visual supports to quantify information; and photographs to illustrate an event of importance, etc.

Technical papers are presented in seminars, conferences and such other congregations. If such papers are read, as on many occasions persons do, the impact of the papers on the audience is very little, despite some good and worthwhile ideas present in them. But on the other hand, if the main points are highlighted with textual matter and supported by visual representations, even a paper of lesser quality will have an effect on the audience. Similarly, if a case has to be built for a project in official meetings, oral presentations with selected text matter and audio-visual support materials will ensure approval of the project with the necessary financial support. Business persons invariably present their products with visual support and impress on the purchasers the value and utility of the product they sell. There is no gainsaying the fact that the information business also needs to exploit these methods in the present day contexts. But not much attention is paid to either the text matter selected or the visual support required. Both these techniques require a good deal of attention.

Many different types of presentation aids are available. Flipcharts give the flexibility to emphasise a particular point in the presentation by instantaneously highlighting or adding

to the point by hand. Because flipcharts are usually drawn by hand, written legibly in bold letters, and do not carry too much information in one, they are most appropriate for informal, smaller presentations.

Transparencies using overhead projectors are very popular in these days in oral presentations. Computer generated information on the acetate sheets greatly enhances the quality of the presentation.

Slides can provide text and graphics, and can be effectively handled, using remote control facilities available for slide projectors.

Multimedia will in the near future provide facilities, particularly, for demo packages, with accessibility to text, graphics and sound through digital representation technology.

In using all these gadgets, the primary factor that would determine the quality of presentation is writing skills necessary to prepare texts and visuals, combined with audio for which the script is also to be carefully prepared.

Self Check Exercise

10) Explain how oral presentation could ensure success.

Note:
i) Write your answer in the space given below.
ii) Check your answer with the answers given at the end of this Unit.

2.6 SUMMARY

This Unit brings the characteristic features of technical communications. These features are the elements or components that together represent structural organisation of the contents of technical communication. In order to identify different characteristic features of various groups of technical writing, a classificatory approach groups them into different categories, giving example of each group. The three major categories are groups that are obtained by using function, type and reader as characteristics for division.

Seven typical writing situations relevant to the Library and Information field are examined with reference to their characteristic features. These are professional writings, proposals, plans, reports, instruction materials, professional services, and correspondence. Illustrative examples exemplify the specific features in each of these categories.

Oral presentations also need textual and visual support for their impact and effectiveness on the audience. This is also explained with a few ideas on the preparation of presentation materials.

2.7 ANSWERS TO SELF CHECK EXERCISES

1) Classifying written communication into various categories is a useful exercise because it helps to analyse and identify the characteristic features of various type of written documents that are produced. Classificatory groups are not mutually exclusive. They indeed overlap very much. They can be grouped only to help identify the distinct categories of each one of them. The purpose is to aid in the formulation of structural designs for each of the categories and assist in the preparation of written materials.
2) The general characteristic features of technical writing are that they:
   a) deal with a subject or a topic;
   b) address a specific target group;
   c) presents the contents in a language that oriented towards a target group;
   d) present the write-up in a form, supported by well designed illustrations and photographs wherever necessary, to draw attention of the target group; and
   e) gets printed attractively, if the document is brought out in a paper-print mode; gets appropriate format(s) if brought out by any other mode.
3) Characteristic features of a review article are as follows:
   - Synopsis/Abstract;
   - Objectives, stating the utility of the article to users;
   - Introduction, giving the scope and coverage of the subject taken for the review, the period, etc.;
   - Identification of sources and criteria for selection of sources;
   - Criteria of selection of items for review;
   - Literature survey as exemplified-by the items;
   - Discussion indicating the trends;
   - Summary and conclusions; and
   - Bibliographic references;
4) Assuming the position to be a teaching one, the following should be incorporated in the proposal:
   - Brief summary for quick reference;
   - Personal data such as full name; full address to which all communications are to be sent; telephone, telex if any; age and date of birth;
   - Father's name and address and position;
   - Educational qualification up to higher education, detailing every data such as educational hoard awarding school leaving certificate, college course, where studied, division/class, years of degree awarded, etc. distinctions achieved;
   - Professional qualifications, if the position calls for;
   - Experience: teaching (no. of years) subject taught, level;
   - Research; title of Ph.D. if any Post doctoral research, if any;
   - Outstanding Publications: papers, monographs, book reviews, etc.;
   - Association with universities and academic bodies;
   - Professional activities; membership in professional bodies, offices held, if any, etc.; and
   - References.
5) The main characteristic features of a plan for retrospective conversion of a library catalogue are :
   - Title and executive summary;
   - Objectives;
   - Introduction;
   - Backlog of material to be brought into the computerised catalogue; the whole collection or selectively in terms of imprint, subject type of material, etc.;
   - Catalogue policy for current materials and considerations for retrospective cataloguing;
   - Downloading from already available machine readable catalogues;
   - Subject indexing;
   - Management aspects, to deal with all required resources;

- Network considerations;
- Relation to other functions such as circulation, library and information services; and
- Action plan for phased execution.

6) The following elements may constitute an annual report of a library:
- Title indicating the period;
- Short summary;
- Introduction;
- Activities: collection development, technical processing, library database, services national and international professional participation, indicating progress m highlighting achievements;
- Statistics in the form of tables and graphics;
- Report on personnel, positions, performance and activities;
- Publications;
- Administrative matters;
- Finance, budget and accounts; and
- Summary and future projections

7) The structural outline of a training course of collection development of a library would comprise the following:
- Title of the course, duration, faculty, etc.;
- Objectives - what the participants can expect from the course;
- Vision of the collection strength quality in next five years, in meeting the requirements of the parent organisation, fixing priorities for subject areas and type of documents;
- Current strength of the collection;
- Policy of building the collection over the next five years and strategy to be adopted;
- Resource mobilisation - funds, personnel, physical requirements;
- Operational management;
- Impact on other functions and services;
- Assessment and evaluation at periodic intervals;
- Summary and conclusion; and
- Appendix.

8) A library brochure is meant to draw the attention of its users, particularly the active users like research scholars, to the facilities available in the library for study and research work others, this brochure would include :
- Title with photographs of the library building;
- Its location facilitating easy access;
- Background and its central role;
- A quick overview of facilities, by way of reading rooms, current periodicals display; reference collection, special reading rooms, reprographic services, etc.
- Collection strength;
- Provision of accessibility through computerised catalogues and bibliographic databases;
- Reference and information services;
- Circulation services indicating borrowing privileges to the research community;
- Professional personnel and their availability for any consultation;
- User education programmes for research scholars;
- Video programme, highlighting some of the library's more important user services;
- Rules and procedures; and
- Summary and conclusions.

9) The letter is to be typed on official letter-head of the library addressed to the Managing Director of the Company, signed by the Director of the library. The following are the c

Dear _____ ,

We are in the process of formulating our plans for modernising our library. We are providing inf support to an active band of research scientists and technologists. A deeply committed manage look after production and

distribution of our products and services. We have a collection of 50,000 documents in the physical and chemical sciences, economics, management science and related areas. This includes books, monographs, a representative collection of reference books comprising international and national standards, some select patents, manuals and guides. We subscribe to 100 current journals most of which are in English and obtained from US and UK. The backfile of journals for the last 10 years are in bound volumes. We have plans to get them on microforms for saving our costly floor space.

We are looking for expertise in library automation besides supplying us the appropriate hardware and software (SW). We would assess the features of the SW package you may recommend on the basis of a checklist of SW features we have already prepared.

Kindly let us know if you would undertake a feasibility study to deal with every aspect of our requirements. Please call on us for a discussion before we move further.

We look forward to meeting you. Thanking you,

Yours truly,

10) Oral presentation could ensure success, only if presentation materials match well with the text of the oral presentation. These supporting materials are to be skillfully prepared. Selecting the physical aids like flipcharts, transparencies for overhead projectors, slides, the text should be featured with dexterity to draw the full attention of the audience. If there is a demo package, it has to be used in preference to other methods. Here the textual and visual matter will have to be thoughtfully prepared. If all these aspects are well-planned, there is every chance of having the right impact on the audience.

2.8 KEY WORDS

Characteristics : Quality or an attribute with reference to which two things can be distinguished.

Characteristic Features : Set of elements or components that give a structural outline of a technical communication.

Correspondence : Special type of writing connected with specific functions of professional management

Flip Charts : Flip charts are widely used in industry. They are portable, require no special equipment, and do not require darkening the room. They allow spontaneity and you can easily use them for notes. They are not useful for large audience.

Instructional Materials : Writings that are meant to provide guidance in learning and using a system.

Oral Communication : Audio presentation of information.

Plans : Document giving a complete blue print for executing an activity.

Presentation Materials : Textual and visual materials that supplement and complement oral presentations.

Professional Services : Library and information services that need writing skills.

Professional Writings	**:**	Writings that deal with professional services.
Proposals	**:**	Technical writings that deal with a formal offer of undertaking any activity.

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UNIT 3 TARGET GROUPS WRITTEN COMMUNICATION

Structure

3.0 Objectives
3.1 Introduction
3.2 Target Groups
  3.2.1 Types of Readers
  3.2.2 Characteristics of Readers
3.3 Reader Analysis
  3.3.1 Guidelines for Reader Analysis
  3.3.2 Checklist for Reader Analysis
3.4 Writing Situations and Target Groups
  3.4.1 Professional Writing
  3.4.2 Professional Writing
  3.4.3 Instructional Writing
  3.4.4 Official Memos
  3.4.5 Preparation Materials for Oral Presentation
3.5 Summary
3.6 Answers to Self Check Exercises
3.7 Key Words
3.8 References and Further Reading

3.0 OBJECTIVES

After reading this Unit, you will be able to:

- appreciate and underscore that success to written communication is determined only when it meets the requirements of the targeted reader;
- recognise different varieties of target groups with their distinct requirements of written communication;
- identify different groups of readers with reference to the writing situations;
- do reader analysis to slant technical communication towards their requirements; and
- adopt this approach in professional writing and also in library and information services,

3.1 INTRODUCTION

We have learnt in Units 1 and 2 of this Block that the underlying principle that Governs written communication is that it should invariably be oriented towards the requirements of the targeted reader. In this Unit, we would expand our study of targeted readers of written communication, their expectations, demands and needs. In other words, we shall try to learn what exactly the readers look for, from a written communication to meet any of their needs.

Every written communication has its own purpose as conceived by the author; but his purpose is not the determining factor that makes the written communication worthwhile. On the other hand, it is the receiver who should feel satisfied with the written material he has got. To understand this, the technique of reader analysis is a useful exercise for providing the necessary guidance to an author. Although this cannot be a method of ensuring success to an author in every writing-situation, it should provide him sufficient guidance in the entire process of writing. The contents, structural outline for fleshing the contents, presentation of the contents in a simple, elegant and lucid language and style, and providing all other aids, are important to make the target users satisfied.

Not only are the groups of readers too large and varied, but also their specific requirements s and purpose vary considerably. We shall pay full attention, in this Unit, to various category: s of target groups and their expectations, needs and demands that should provide useful guidance in the process of writing on technical subjects.

3.2 TARGET GROUPS

We have learnt that any communication process, be it oral or written, terminates with the message reaching the receiver. The receiver may be an individual or a group of persons functioning in different situations. These receivers are generally referred to as the audience or more specifically readers. The term `readers' refers to individuals, or a group of individuals who have potential for being exposed to and using a written information product or service.

The views of reader adopted here do not presume that the user group must be of a specific size or particularly diverse, that all its members be exposed to the same information at the same time, or that members of the group must be unknown to the information producer More basic is the view that the information product or service offered must be deliberate] produced and distributed to meet the requirements of different groups.

The essence of this approach is that information should be aimed at a specific target grout There could be, however, many categories of readers based upon characteristics chosen for the purpose for which the written communication is attempted.

Self Check Exercise

1) Explain reasons for slanting technical writing to readers requirement.

Note:

i) Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

3.2.1 Types of Readers

Readers can be classified by a) age and sex; b) individuals and groups; c) level of knowledge in a subject; d) level of technical proficiency; e) institutions and organisations and similar other characteristics. The requirements of these groups can be matched against writing situations; and the appropriate documents can be produced. It is, however, important to note that for classification of anything, there is no single characteristic or a single set of characteristics for division that could meet every purpose. The resulting groups are also not always mutually exclusive. The choice of characteristics invariably has to depend upon the purpose of division.

Writing situations and the target groups are given below. These are only illustrative, not exhaustive.

Sl. No	Writing Situation	Target Group
i)	Persuasive writing (proposals, promotional materials, etc.)	Directors of an institutions; Top managers of companies; Special committees; Consumers of products and services; and the like.
ii)	Instructional writing (Teaching and learning materials, guides, manuals, etc.)	Students and teachers; Professional and technical personnel; users of different categories.
iii)	Writings aiding decision snaking processes (feasibility reports, committee and commission reports, etc.) Professional writings (Scientists, specialist groups of technocrats, technicians, managers, etc.)	Heads of institutions; Departments of govts. Business and industrial undertakings; and the like. Peers in science and technology; Various levels of subject/professional expertise; Generalists but non-professionals; Laypersons.

Table 1 : Writing Situation and Target Group

While the members of the above reader groups are consumers of information, technical communication underscores the active and dynamic quality of consumers. This leads us to the discussion of audience analysis.

Self Check Exercise

2) Identify a few categories of reader and relate them to the type of writing situations.

Note:

i) Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

3.2.2 Characteristics of Readers

The goal of technical writing is to communicate information that is needed by a user group. The writer must be clear that the information conveyed is not to impress a user with his/her prowess for writing. Neither the information is for pleasure or for entertainment. It is also to be understood, particularly by beginners in technical writing, that readers who use the document come from different levels of subject background or technical proficiency. In other words, the entire piece of writing must be slanted to the expectations and abilities of use of the target group.

Just as a writer is induced by some motivation to write, readers also have some reasons to use a written document. Various factors such as goals, needs, attitudes and

values, capability and competence, utility, communication style, context, experience and habit of audience group determine the nature of technical writing.

The goals of a user group may be to achieve competence in an area such as computer skill to improve the person's chances of improving career opportunities. Research scientists may be interested in keeping themselves abreast of current developments in their field of research. A business person may be keen to enlarge the scope of his business by studying available market reports on the nature of consumers in a locality.

Most often needs of users necessitate them to seek information. These needs may be m by a manual or a reference guide.

Attitudes - preferences and predispositions about particular topics, people and situations - also play a critical role in information consumption. It is also observed that most persons will look for information and interpretations that support their perceptions before they will consider nonsupportive information.

Values are basic principles that often determine users' choice and preferences in the selection of information. As with attitudes, values also can substantially influence users in their choice selection, interpretation and retention.

The interrelationship of attitudes, values, and information consumption is a complex one. On occasions, information inconsistent with our attitudes can lead us to give it more attentive than that consistent with our attitudes. We spend more time to reflect on information that troubles us than on messages that are consistent with our perspective; our tendency, vet often is to take the latter for granted.

Competence and capability of users on a particular subject or topic and the facility with which they understand the technical jargons and the language style and tone, have obvious impact on the kinds of information sought.

Generally speaking users will attend to and make efforts to understand and remember information that they are intending to use. To an individual who is interested in buying television set, informative articles on the qualities of TV sets, advertisements and trade literature, etc. would be much more relevant, and of immediate use than a technical article o TV sets.

The context in which a person functions, determines his needs and utility for that information If the information is not available at the time required to meet a particular need in a give context, that information may not have any use for a user later.

Users of information, also develop habits or inclinations as a result of their experience in the reception or response to different kinds of information. Preferances for certain author journals, institutional publications are some of the habits that users cultivate.

The initial exercise in the process of technical writing, therefore, has to study the audience to whom the writing is meant for. This exercise is not a mere academic ritual. It is the firs and probably the most important step in the process of technical writing.

Self Check Exercise

3) Give a few characteristics of audiences that tend to influence the technical writing process.

Note:

i) Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

3.3 READER ANALYSIS

Writing about reader and adaptation, Ram D. Taneja (1990), accentuates the need for studying the reader for whom the writing is intended. He writes, "the first great principle of writing is economy of mental effort on the part of the reader. When a writer assumes the reader's knowledge of the subject or interest in the subject mirrors the writer's own, it usually results in extra effort on the part of the reader. A specialist, writing for other specialists in the same field often feels justified in making the reader work to understand the text, under the assumption that, since the reader mirrors the author's knowledge and interest concerning the subject, they are willing to put as much work into reading the text as the author puts into writing it. Unfortunately, that is often a mistaken assumption. A skillful writer will take the time and trouble to write for a real audience, making a realistic appraisal of their knowledge, their interest and their willingness to expend effort in their reading. *A skillful writer remembers the reader."*

The reader for a good part of technical writing is diversified, from the persons trained in related technical specialities to those with little or no technical background. In such instances, it is the writer's responsibility to bridge the gap wherever necessary. That gap can be considerable, depending upon the nature of the technical document whether it is for a laymen, a technician, a semiskilled operator, or an expert engineer. For instance, the reader for a user guide to a software package in graphics for personal computer might include:

- management
- engineers
- students
- professors
- secretarial staff
- programmers
- professional staff
- marketing staff

"In every field the number of situations requiring one to write for a reader which is not composed of specialists in that field is on the increase. Architects write for bank officers, engineers write for departmental estimate committees, chemists write for management, and everyone writes for government bureaucrats" (Ram D. Taneja, 1990).

Knowing the readers' depth of subject background and interest has therefore, become essential in technical writing. Systematic studies to understand a reader is generally referred to as “reader analysis”. Some writers prefer to use the expression “reader adaptation” for reader analysis.

Self Check Exercise

4) Explain the need for reader analysis for being successful in technical writing.

Note:

i) Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

3.3.1 Guidelines for Reader Analysis

As an understanding of the reader is so fundamental to successful technical writing, many writers prefer to prepare `Reader Profiles' before beginning any complicated assignment. Some of the facts, among others, that they try to obtain of readers include their

- general education
- subject specialisation,
- position in organisation
- responsibilities in, organisations,
- need for information
- possible use of information obtained, and
- preferences in reading
- expectations in a technical document

Such reader profiles may help categorising readers into primary, secondary and fringe grout. The writer *adjusts* the organisation, emphasis and language of the writing according the requirements of readers. If this preliminary step is overlooked, the efforts in preparing a technical document would become a waste, particularly if the document is unrelated the reader's level of understanding.

It is suggested by experienced technical writers that writers develop a profile of their reader and group them in the following manner:

- High-tech readers
- Low-tech readers
- Lay readers
- Mixed readers
- Multiple readers

Self Check Exercise

5) State some of the facts that should go into a reader profile.

Note:

i) Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

3.2.2 Checklist for Reader Analysis

We have noted that different readers pose different problems for a writer in organising and presenting his/her writing. A checklist is given below to give a general guidance to aid writers to prepare their reader profiles:

- Content: Depth or shallow; long or short; relevant or irrelevant;
- Concepts: Familiarity or unfamiliarity with concepts; laymens's definitions or standard technical definitions; lengthy or short explanations;
- Vocabulary: Popular or technical;
- Organisation: All or selected facets of a topic; Preferred or conventional sequence;
- Methods of Development : Necessity for (i) a historical perspective (ii) Comparison and contrast;
- Graphics : Necessity to support text; kinds of graphics; and
- Others.

Self Check Exercise

6) Mention a few headings that would be useful to prepare a checklist for reader's guidance.

Note:

i) Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

3.4 WRITING SITUATIONS AND TARGET GROUPS

In the foregoing sections, we have been discussing some general aspects of readers and the need for a writer to slant the writing to respond to specific requirements of target groups. In this section, we shall take a few instances of technical writing and examine the correlation required to match reader requirements. The five writing situations taken for illustration here are:

- Professional writing;
- Proposal writing;
- Instructional writing;
- Office memos; and
- Preparation materials for oral presentation.

3.4.1 Professional Writing

Professionals are not always one homogenous group for whom one kind of writing would meet all requirements. There is the peer group who are equals, have more or less the same or similar qualifications and professional experience. Practioners, who are in operational positions and who have considerable field experience constitute another subgroup. A third group would perhaps be the learning groups who are freshers, needing field experience and looking for information that would enhance their pragmatic-knowledge and theoretical foundations.

Learned journals largely satisfy the first group viz. peers who would look for developments n the field and would like to *verify* and assess results, and critically evaluate the quality of research. Although there are certain conventions and practices in writing for this group, the vain aspects are not to state that they are already well

known and established among the peers. The writing would have to be specifically dealing with wavefronts of knowledge and research conducted in these areas. The writer would await peer groups reactions and critical comments that would reckon the contribution and also establish the person's standing and reputation in the field.

The third group comprises learners (and not beginners) in the field, most of them being in positions of picking up valuable experience, working under seniors. They have the necessary academic background and would be able to understand technical contributions. They may 1ake abilities for critical examination. Writers for this group should come down to these groups levels of exposition required of a subject, so that their purpose to widen their knowledge is served.

3.4.2 Proposal Writing

While there are a variety of proposals, the main purpose of a proposal is to convince the reader to get the proposal approved along with financial and other supports sanctioned r the projects and programme proposed.

Whether a proposal is solicited or unsolicited, usually these are examined by the top person in the organisation who provides formal approval and sanctions. This person may be supported by technical experts in the organisation who may submit their critical assessment on different aspects to him. Sometimes the proposal may be examined by a technical committee who collective view is taken for decision making by the top person. So there are a number of persons who would be involved in reading proposals. Hence the writer has to be careful to make the proposal absolutely clear from every point of view.

As we have noted in Unit 2 of this Block, the elements of a proposal are a) letter of transmittal; b) title; c) executive summary; d) table of contents; e) introduction; f) methodology; g) facilities required; h) personnel; i) duration; j) cost; and k) summary.

Every one of these elements is important since every element has a particular function. Thy persons who examine the proposal would look to the proposal from i) methodology point of view that reflects a certain degree of competence; ii) economics of the proposal including facilities requested and the budgetory positions, etc.; and iii) personnel that may be involved So each of these groups may examine a particular section of the proposal and hence the writer has to give attention to every one of these elements.

3.4.3 Instructional Writing

Audience to this group would also comprise many groups. Among others, these groups may include learners, technicians working at operational levels, persons who guide, and those that assess the quality of instructional materials.

For those who are attending a course, teaching and learning materials that are prepared for the course, must help the process of learning and teaching. Care has to be taken by the writer to provide all the help required by way of lucid presentation with many illustrations, examples, and exercises to check the progress of learning, and a summary to recapitulate the main points.

Manuals for technicians at operational levels should help to apply the techniques with ease, in a step by step method, indicating pitfalls while operating a particular technique, diagrams, flowcharts and other visual aids, etc.

Persons who are supervisors should be able to use the manuals to instruct the trainees with suggestive examples, simulate various situations and attempt to develop self help while learning.

What is being stressed here is that user groups' requirements will have to be uppermost in the mind of the writer.

3.4.4 Official Memos

Memos are informal and formal messages communicated within an organisation. The contents are always internal organisational matters and addressed from the top to lower categories of personnel or among the employees from one to another section. Such internal memos should promote understanding and harmony and help the process of smooth functioning. Groups of persons are the general readers to this category of technical writing. Some of the attributes of a good memo include tone and language of writing, a positive approach to a particular problem, certain degree of persuasive writing if some aspects of a solution to a problem has to be generally accepted, and similar others.

3.4.5 Preparation Materials for Oral Presentation

We have already known that any good oral presentation has to be supported by written material, supplementing and complementing oral presentation. While flipcharts, OHP transparencies, slides and other aids are used during the presentation, certain types of written documents are also distributed during the talk to the readers. These documents are to reinforce the main arguments with reference to the topic of an oral presentation. These will be read by persons who have attended the talk and also by others who have an interest in the area but have not attended the talk. It should be a self-contained document, explaining every aspect of the topic. The idea is that persons who have the document should get interested in the oral presentation also and would make up their minds to attend similar talks when presented.

Self Check Exercise

7) Identify different categories of reader's for a feasibility report for library automation.

Note:

i) Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

3.5 SUMMARY

In this Unit, emphasis is laid on the study of readers for any type of technical writing. The main points of this Unit are:

- Any piece of technical writing has to be slanted towards the requirements of the readers;
- Readers are always a diversified group; they have to be classified, choosing characteristics relevent to the purpose. By way of illustration, there are four characteristics chosen for categorising readers, such as persuasive writing, instructional writing, writing for decision making and professional writing;
- Emphasising the need for reader analysis, some guidelines and-a checklist are given to prepare profiles of user groups in a given context; and
- Five writing situations are taken to match them against their target audience. Professional writing, proposals, instructional writing, office memos and presentation materials for oral presentation are the examples given.

3.6 ANSWERS TO SELF CHECK EXERCISES

1) Any information generated is meant to reach its seeker to serve a particular purpose. Its use and utility have to be the prime motive of the writer in his efforts in writing. Otherwise the efforts in technical writing are wasted. Hence a writer has always to adjust his writing to the needs and requirements of the reader.
2) Learners and instructors will always look for course materials that would serve their immediate needs.
   Professionals will seek information to keep abreast of the developments in their fields.
   Industrialists would look for market information dealing with consumers' preferences in planning a new product development.
   Consumers in deciding to buy anything would seek aid in getting information about prices of products, quality, availability and such other information.
3) Various factors such as goals, needs, attitudes and values, . capability and competence, utility, communication style, context, experience and habit of audience groups, determine the nature of technical writing.
4) Readers do not constitute one single homogenous group. They are diversified with different needs, abilities to comprehend topics in different subjects, interests, context in which they need information, etc. Unless a writer understands all these through some kind of reader analysis, it is difficult to write to satisfy any group.
5) Some of the facts, among others, that writers try to obtain regarding of readers include their :
   - general education;
   - position in organisation;
   - need for information;
   - preferences in reading;
   - subject specialisation;
   - responsibilities in organisations;
   - possible use of information obtained; and
   - expectations in a technical document.
6) A checklist, given below gives a general guidance to aid writers to prepare their reader profiles:
   - Content : Depth or shallow; long or short; relevant or irrelvant;
   - Concepts : Familiarity or unfamiliarity with concepts; laymens's definitions or standard technical definitions; lengthy or short explanations;
   - Vocabulary : Popular or technical;
   - Organisation : All or selected facets of a topic; Preferred or conventional
   - Methods of Development : Necessity for (i) a historical perspective and (ii) Comparison contrast;
   - Graphics : Necessity to support text; kinds of graphics; and
   - Others.
7) The three groups of readers who would have a stake in a library automation programme are the users, the library staff and the parent organisation.
   The feasibility study should spell the advantages of a library automation programme from the point of view of better library facilities for access to information collected in the library.
   The fear of retrenchment, undermining the role of senior staff of the library who are not well-versed in computer applications, and serious change in the managerial structure which may not be sympathetic to them should be removed from their minds. The staff as a whole should accept the automation programme as an opportunity to build up a better image of the library. The management of the library moving from manual to automation should be handled with circumspection.

The parent organisation would expect a return from the investment they have made. There should be a definite visibility in terms of user services, smooth transformation of the modernisation programme.

3.7 KEY WORDS

Reader	:	Individual or a group of individuals who have potential for being exposed to and using an information product or service.
Reader Analysis	:	Analysing a target group with reference to a writing situation. A reader who is well-versed in any discipline or profession. Readers who use information.
High-Tech Reader	:	
Information Consumers	:	
Instructional writing	:	Writings that aid the process of learning, teaching, application operations, etc.
Lay Readers	:	Readers who have just a commonsense knowledge of a subject or profession.
Low-Technique Readers	:	Readers who have a smattering knowledge of a subject or profession.
Mixed Readers	:	Composite readers with various degree of specialisation in a discipline or profession but having a common interest in a particular subject or profession.
Multiple Readers	:	More or less similar to mixed readers.
Professional Writing	:	More or less similar to mixed readers.
Target Readers	:	Reader for whom a particular writing is meant.
User Group	:	Synonymous with reader.
User Profile	:	Data on any type of readers as a guide for technical writing.

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UNIT 4 READER-WRITER RELATIONSHIP

Structure

4.0 Objectives
4.1 Introduction
4.2 Communication Chain
4.3 Reader Response and Feedback
4.4 Reader-Writer Relationship
  4.4.1 Instructional Documents
  4.4.2 Study/Investigation Reports
  4.4.3 Promotional Materials
  4.4.4 Scripts for Video Programmes
4.5 Readability Yardstick
  4.5.1 Fog Index
  4.5.2 Flesch Formula
4.6 User Studies
  4.6.1 Library and Information Science
  4.6.2 Publishing
  4.6.3 Mass Communication
4.7 Summary
4.8 Answers to Self Check Exercises
4.9 Key Words
4.10 References and Further Reading

4.0 OBJECTIVES

After reading this Unit, you will be able to

- comprehend the dual roles of generators and users of information in a communication process;
- explain the process of response and feedback to writers for their efforts in technical writing;
- reckon reader-writer relationship in typical writing situations;
- become familiar with research in measuring readability; and
- recognise possibilities of applying the methodologies of user studies in technical writing.

4.1 INTRODUCTION

You have studied reader analysis in Unit 3 of this Block as a method of recognising information needs of users that constitute the first step in technical writing. In this Unit we shall study the ways by which writers could try to get users' response to their writing and obtain useful feedback, to match users' information requirements adequately.

Unlike creative writing wherein the readers need not be a well-defined community, in technical writing, on most occasions, writers know fairly well the type of readers, whom the writing is meant for. In many writing situations, writers could assess or ascertain the quality of writing required even as they begin.

In this Unit, we shall try to understand how reader-writer relationships could be established in many technical writing situations. In certain situations, reader response and feedback could also be seen as a built-in feature, forming an integral part of the information communication process.

In recent decades, there have been research efforts to determine appropriate yardsticks to measure the readability of a technical document. Although there is no unanimity of opinion in the use of these readability yardsticks in actual writing processes, they may serve as useful guidelines, particularly for beginners.

User studies have become a field of intense research in Library and Information Science, corresponding to market and consumer research in business. The methods to assess users' reaction to information products and services have thrown considerable light on planning activities that are highly user-oriented. Publishing trends and reader analysis in mass communication also are increasingly focused on use and user. These studies can be profitably used in technical writing also (to the extent applicable) in the context of professional writing in library science, in addition to providing information services.

All these aspects of writer-reader relationship are discussed in this Unit.

4.2 COMMUNICATION CHAIN

We know that generators and users of information are operating at the two ends of the communication transfer chain. Particularly in technical communication, the generator of a piece of information is also a user at the same time, of some other relevant information, generated by someone else. This dual role of a generator/user create a sort of reader-writer relationship that gets in-built into the system of technical communication, i.e., a writer has a considerable understanding of the nature of requirements of users; and the writer, therefore, always can adjust the writing to respond adequately to the needs of a special reader.

In professional communication, especially in Sciences, there is a pattern of flow of information from the generator to the user. Research papers, monographs, treatises, research reports and the like are normally passed through a mechanism of quality control. In this process, the science community is totally involved in one way or the other. While most of them are active writers, reporting their research results through Science journals and other communication channels, they are also involved as referees, journal editors, users and in similar other functional capacities in the communication process. As a result of all these, writers get to know their readers besides being fully aware of the purpose for which their readers use their outputs. Hence the reader-writer relationship is in a way in-built into the system of science communication.

In other technical writing situations too, there is a reader-writer relationship although not so explicit as we see them in professional writing. In proposal writings or feasibility report writing and such others, there exists a relation between the writer and the persons or organisations for whom these documents are written. In most cases the terms of references are spelled out or a clear understanding of the purpose of the report is obtained prior to taking the studies or investigations.

It is therefore possible to discern a kind of reader-writer relationship that always exists between a generator of information and its ultimate user.

In technical writing, writers do have a facility to know their readers. We shall discuss in the next section, how a writer could gauge user response and get a proper feedback to his/ her writing.

Self Check Exercise

1) Describe briefly how generators and users of information play a dual role in communication transfer chain.

Note:

i) Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

4.3 READER RESPONSE AND FEEDBACK

Reader response here means the behaviour and reactions of users to a piece of technical writing. Feedback refers to the way they express their reactions, either positively or otherwise, to the technical document after reading it.

Writers in science may obtain direct response to their research writing through personal interactions and discussions with their peers in conferences, meetings or through correspondence. Often preprints are exchanged among peers in many disciplines of science, even before the research papers get published in learned journals or presented in national or international forum. This kind of reader-writer contacts among scientists is a normal feature of science communication.

There are also many other indirect means by which technical writers can obtain response and feedback to their writings. Book reviews, review articles, annual reviews, advances, state-of-the-art reports, citation practices, document delivery systems, indexing and abstracting services, etc. provide some scope for writers to assess how their writings have been received by the user community.

In writing situations, other than professional writings, there is an implicit understanding of the purpose of writing. In many instances, there is an indirect involvement of the reader in the preparation of a technical communication. Prior to the process of writing a proposal, feasibility report, or commission report, meetings take place between the writers and the user community. At later stages of the progress of work also, meetings are held to ascertain if the contents of the technical communication are in conformity with the original agreement between the two sides. In this way, the reader-writer relationship gets established.

Having said so much about response and feedback, we shall examine this reader-writer relationship in a few specific instances.

Self Check Exercise

2) Distinguish between direct and indirect response and feedback.

Note:

i) Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

4.4 READER-WRITER LATIONSHIP

Let us take four typical types of writing situations, each of which has its own parameters an(the readers. The four writing situations are:

- instructional documents,
- study/investigation reports,
- promotional materials, and
- script for a video programme.

4.4.1 Instructional Documents

Instructional documents include course materials for learning and training, operation manuals, literature guides, etc. Each of these categories of documents has a distinct group of users. Opportunities of interaction with them may offer writers considerable insights into the type of writing required by them.

Course materials for short or long range training programmes, prepared for specific courses can be tested at various stages of the training period. Short courses have a method of assessing users' reactions to course materials by circulating a questionnaire at the end of the course. The analysis of data obtained through well-designed questionnaires can throw useful tips to improve the quality of these course materials. The demand for course materials is an indicator of their quality. Several versions of the revised course materials can be tested at periodical intervals to get proper feedback and user response to improve their quality.

Operation manuals are also tested to obtain reader response and feedback. Along with analysing and interviewing readers, writers sometimes evaluate audience needs through user tests of an operation manual while it is still in draft. In fact, manuals and instructional materials are particularly good for user tests because their primary purpose is to guide readers in performing certain functions. When potential readers test a document's usefulness before the final draft stage, a writer can make needed changes in design and content based on the feedback from the readers. Three types of tests for obtaining user reaction and feedback are usually employed.

i) Readers' Response to Questionnaires: Asking readers to respond to well designed questionnaires help a writer to decide whether the document can be well understood and profitably used. A company or an institution that is promoting a market for a product may distribute a brochure to consumers, say for example, a brochure for a grinder. Through a user test, the writer can determine if the brochure answers consumers questions. Several versions of the same brochure also can be tested to determine which version readers find most useful.

The test may involve the following steps:

- a group of typical consumers reads the draft(s) of the brochure;
- consumers answer a series of questions on the contents and style of presentation;
- consumers may also answer questions on the different types of users;
- analysis of data obtained through these questionnaires; and
- revision of portions of the brochure that would meet all the desirable changes required of users.

ii) Performance Test : In this test, a writer may be most concerned, whether readers will be able to follow instructions and perform a task correctly. A manual may be tested at the draft stage by operators and technicians who will use the final version. The user test follows the same general pattern as the preceding test but the emphasis is on performing a task.

The sequence of steps are :

- selected operators follow the written instructions to perform steps of a procedure;
- the length of time to complete the task is recorded, as well as how smoothly the operators proceeded through the suggested steps;
- the operators analyse reactions of user groups who are likely to adopt the manual their comments on how effective they found the instructions and areas that were unclear;

- analysis of the results focuses on correctness in completing the task, the length of time required, and the portions of the document that received the most criticism from the readers; and
- the writer revises the sections that were not clear to the readers and retests the document.

iii) *Testing Simultaneously with Readers:* Another type of user test requires readers to think aloud as they read through a document. This method, called protocol analysis, allows the writer or design review team to record readers' responses everywhere in the document, analyse readers comments, and revise content, structure, and style accordingly. Readers may not like the jargons, the sequence of the presentation of different aspects, too much or too little detail, graphics, or sentence clarity, etc. The writer can then revise these areas before the final draft.

Users' tests have become increasingly important for audience analysis, especially in large institutions. The Document Design Centre of the American Institute for Research in Washington D.C. established a Usability Test Laboratory in 1985 to assist businesses in testing documents and evaluating readers' responses to written materials.

Self Check Exercise

3) Briefly explain the three tests for readers' response and feedback for instructional materials.

Note:

i) Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

4.4.2 Study/Investigation Reports

Study or investigation reports are usually commissioned by institutions or government bodies to study a problem or investigate an event or activity that needs a probe and attention that would lead to a decision or help evolve guidelines for the future. The individual or a team that deals with such a study or investigation, is usually given a set terms of reference and is also asked to submit the report within a specific time frame. The members involved in such studies or investigations have access to all who are associated with the study or the problem that would be useful to those who are formulating the programme of investigation. They may have also direct contacts to ascertain the views more personally or obtain information and data through questionnaires. The reaction of user community is also obtained through a series of meetings in which the terms of references are not only spelled out in detail but also modified if necessary. Periodic meetings are also held to evaluate the progress of the study or investigation to channelise the methods and to draw appropriate conclusions. In this, the writer-reader relationship is present very much in the process, aiding the task of preparing the final report that could lead to taking correct decisions.

4.4.3 Promotional Materials

Information today is increasingly being considered as an economic product, sold and bough Books, journals, conference proceedings, patents, standards, online database services, indexing and abstracting services, CD-ROMs, library management software packages, library network facilities and many other information products and services are in the market. Consequent) many of the business practices are slowly entering the information field, like advertisement (Ads), demos for products, etc. for product promotion. Special promotional materials are prepared highlighting the features and qualities of the product. Ads are also appearing i print and non-print media to inform the customers and potential buyers on the range o information products and services.

The American Marketing Association defines that Advertisement is any paid form o nonpersonal presentation of ideas, goods or services by an identified sponsor. Essentia113 it is promotional and persuasive in nature. Breaking down this definition, there are foul properties of an advertisement as given below:

- The message is paid by the customer;
- The message appears as to-whom-it-may-concern information, even though the appear is made to look personal;
- The information promotes ideas, goods or services; and
- The client is identified.

The consumer is a participant in the advertising process. An understanding of the consumer's criteria for relevance, credibility, and usefulness for the information received is of great importance. Ads help to make advertising more successful and profitable. Important to this concept is advertising in a context where the consumer receives considerable information not only from the advertiser, but also from competitors, critics, consumer advocates, news sources, friends, neighbors, and co-workers. The information received by the consumer does not fall on a blank slate. It is assigned a value according to the information received.

Advertising is a versatile field, much broader than mere *selling to the consumers* the idea of purchasing what a manufacture wants them to buy. Different types of ads serve different functions.

- National consumer advertising makes consumers aware of the product or service and builds an interest in purchasing it;
- Retail and local advertising informs the consumer about where products can be purchased and what special deals are being offered;
- Institutional advertising builds consumer trust in the institution/company that makes the product;
- Goodwill or public service advertising is a form of institutional advertising in which the sponsor does not mention products or services, but instead hopes to create good feelings that may translate into support later;
- Trade and industrial advertising is aimed at manufacturers, and is seen mainly in specialised trade publications rather than mass media consumer channels. Trade advertising is aimed from manufacture, to retailer, while industry advertising is one manufacturer selling goods or supplies to another manufacturer;
- Political advertising gives voters reasons to support a candidate, or provide information meant to persuade citizens to support a cause such as panchayat elections or homes for the urban poor;
- Informational advertising provides special information concerning products, and responds to questions or charges raised by consumer associations, health authorities, or competitors; and
- Corrective advertising may be issued by a government agency, repudiating supportable claims by earlier ads that might have misled customers.

Ads are important means of communication which demand special skills in conceptualisation, and in transforming ideas into visuals and write-ups. More than anything else they require an intuitive ability to gauge user responses. Demands for products and services may have to be created in many situations. The field of information is one in which the utility of information as a means of enlarging the scope of improving business or creating new knowledge, etc. have to be marketed. Ads as promotional materials in marketing information products and services are undoubtedly the best means to achieve useful results.

4.4.4 Script for Video Programmes

Script writing for video programmes is assuming very great importance in the present context of multimedia communication. News magazines on public affairs, educational materials, business and managerial practices and many other programmes are produced on video cassettes and used as a powerful means of communication. The ability and skill to concretise ideas, think and choose appropriate visuals are indeed challenging. The writing has to be minimal but most effective to support visuals and the voice has to be in the background while reading the script. It is a team work of specialists, script writers, video programme directors and other technicians. The involvement of the targetted audience from the very beginning to the final stages of the video cassette production is too important to neglect. At various stages of the programme, select audience will have to be involved in helping the process of giving a proper shape to the video cassette.

The reader-writer relationship has to be established from the very beginning to achieve success in such ventures.

Self Check Exercise

4) Briefly describe reader-writer relationship involved in a) instructional documents b) study/investigation reports c) promotional materials and d) script for a video programme.

Note:

i) Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

4.5 READABILITY YARDSTICK

Readability has, perhaps, to be more appropriately discussed under language and style in technical writing. Nevertheless it is important to draw attention to readability in this unit also, because it is an essential ingredient of the reader-writer relationship.

A document despite being extraordinarily rich in its contents may fail to serve its purpose in making the reader understand and use it, if it is drafted clumsily without clarity.

A good body of literature is available on research papers on readability yardstick. Since the 1920s more or less thirty, useful formulae have been devised that purport to show the gereral readability level of prose.

The two formulae most generally used today were developed by Robert Gunning and Rudolf Flesch. The former developed a formula to measure the difficulty of reading matter by the use of a readability yardstick.

4.5.1 Fog Index

Gunning labels as `Fog' all writings which fail to make ideas clear. His formula bui over a period of years after much experimentation, includes two factors: a) average numbs of words in a sentence, and b) the number of hard words of three or more syllables in each 100 words of text. He called his formula the `Fog index'. The formula is:

SP + PS X 0.4 = Fog Index

where SP is the average sentence length. The figure is obtained by dividing the number of words in a passage of text by the number of sentences contained in it.

PS is the percentage of words of three or more syllables, i.e. polysyllables.

To find the Fog index of his manuscript, a writer marks out samples of approximately 100 words each, spaced evenly throughout the document. He then divides the number of worth in all the passages by the number of sentences. The result is the average sentence length (SP).

Next, he counts the number of three-syllable (or more) words in each 100-words and substitutes the figure for PS in the formula. Finally, he adds SP and PS and multiplies by 0.4. The result is the `Fog Index'.

Gunning believes that easy reading matter should have a fog index of about 10, which incidentally corresponds to that of Reader's Digest. But in most technical writing, which is mostly concerned with exposition of complex ideas, a sentence length of about 20 and fog index of 12-17 is acceptable, though Gunning says a copy with Fog index of 13 or more, runs into the danger of being ignored or misunderstood.

4.5.2 Flesch Formula

Another commonly used and discussed measure of readability is the formula developed by Rudolf Flesch. Flesch has reduced the formula to a handy pocket book. General Motors and other well-known American companies incorporated the yardstick into a copy-righted gadget called `Reading-Ease Calculator'. In his later work, Flesch divided his previous formula into the following steps:

a) Multiply the average sentence length by 1.015

b) Multiply the number of syllable per 100 words by 0.846

c) Add (1) and (2)

d) Subtract the sum from 206.835

e) The remainder gives the reading difficulty level.

The scores as derived above are located on a scale ranging from 0 to 100. At the bottom of the scale writing is so difficult that it is unreadable for all practical purposes. At the top the language is easy for any literate reader.

A reading ease score of 0-30 is considered very difficult, 30-60 fairly difficult, 60-70 standard, 70-80 fairly easy.

There are different shades of opinions expressed for adopting these yardsticks as essential criteria for technical writing. Two remarks of two experienced writers are quoted below on their validity and usefulness.

Taneja writes, "Like all good inventions, readability yardsticks can cause harm when misused. They are to be regarded only as handy statistical tools to measure complexity in prose. They are useful to determine whether the writing is gauged to its readers. But they are not formulae for writing. So please remember to use yardstick as a guide only after you have written, but not as a pattern before you write. Good writing must be alive and interesting, not dull and cloudy. Do not kill it with a system by turning out dull, standardised writing that fails to attract readers."

"Writers who are aware of their readers and their purpose in writing are better able to judge the effectiveness of a specific sample of writing than any of the formulae yet devised." (Sherman)

Self Check Exercise

5) What are readability formulas? Are they necessary for technical writing?

Note:

i) Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

4.6 USER STUDIES

User studies in this Unit connotes a wider meaning than normally understood in the context of Library and Information Science. The central idea in user studies is that users' satisfaction is the uppermost goal of any communication, just as customers' satisfaction is in any commercial transaction. In technical writing also, user benefit and satisfaction are the only goals.

Let us consider users satisfaction in three different areas of technical communication, viz. 1) library and information services; b) publishing; and c) mass communication.

4.6.1 Library and Information Science

Professional motivation to focus attention on research efforts to study users' behaviour in seeking information, use of various types of documents collected in libraries and information centres, developing user-oriented library and information products and services, etc. have become thrust areas in the last three decades. Methods have been developed to assess users' interest to build up collections in libraries, create user friendly databases for information available in the collection, and offer various types of library and information services from the in-house and external databases, and such others. Readers interest profiles to organise SDI services, partnership services in association with users to develop services of high intellectual quality, and siimilar other services are of critical importance to meeting actual and potential needs of users. Many of the new and innovative services necessitate highly cultivated skills in technical writing.

Among the several methods to develop user-oriented information services, bibliometric analysis offers good insights into measuring quality. Citations analyses have offered useful indicators to measure (i) the quality of research of individual scientists, (ii) ranking research articles and papers, journals and leading institutions contributing to research, and (iii) define acquisition policy for building most useful journal titles in research libraries, and many others. These indicators are also useful measures to writers to assess their own impact on their readers. In other words, bibliometric studies provide writers a useful method for understanding and estimating audience requirements and slant their writings to meet the purpose of users.

Citation analysis, however, is applicable only in some types of writing situations, such e professional writing wherein citation practices have become a normal feature. Publishing and book selling also offer some useful hints to writers to gauge the readers' reaction t their writing. In the next section, we shall give a quick look at current publishing trend that throw some light on the reader-writer relationship, perhaps indirectly.

4.6.2 Publishing

Publishing trends can be seen in three dimensions which may have implications for writer: in relation to their relationship with readers.

a) In order to sustain themselves financially, publishers have resorted to publishing book and periodicals of general and common interest in paperbacks. Publishers feel that they will have the capital to publish worthwhile but unprofitable books for the elite public only if they successfully satisfy the needs of masses who want entertainment material. Among the areas of specialised book publishing are :
   - Reference books - encyclopedias, dictionaries, directories, compendia of historical data, bibliographies;
   - Professional books - esoteric knowledge in specific disciplines, business or trade;
   - Textbooks - designed to fit the specific needs of students at schools and higher education;
   - Children's books - picture books, science and learning, juvenile fiction;
   - Technical, scientific, law and medical books; various updating the specialised in fields where information and knowledge grow fast; and
   - Entertainment, self-improvement, how-to-do, religion erotica and hobby, including popular science, science fiction, etc.

b) Titles of best sellers of fiction and non-fiction books are periodically published by New York Times. In its weekly book review section, several best-seller lists are published. Hardbacks and paperbacks are separated. The non-fiction best-seller list is dominated by biographies of celebrities. Among the best-sellers of non-fiction books, was Alvin Toffler's *`Third Wave'* that was a best-seller in the eighties.

c) Publishing houses in the western countries are diversifying their activities to include periodical publishing, cable television, film production and distribution, etc. The main purpose of diversifying appears to be a financial necessity. Journal publishing which has been one of the main activities of learned bodies, professional association and academia, are increasingly becoming the province of commercial publishers.

d) Electronic publishing is introducing a completely new avenue for business in publishing and booktrade. Marketing of books and information are becoming very specialised activities and specialists in this area are being promoted by large publishers and book sellers.

   All these trends have great implications for writers, more particularly for those who are in technical writing. A variety of publications are coming out, which call for new skills in writing in which a new kind of reader-writer relationship is emerging.

4.6.3 Mass Communication

Mass communication is defined as a process through which the information base of a culture is created, distributed and shared. Mass media are institutions that are formed specifically to engage in the mass communication process. These mass communication institutions play indispensable roles through packaging, disseminating, distributing, popularising, validating and commercialising the cultural information base.

Mass media such as newspapers, radio, television, films have long played a functional role in packaging and transmitting cultural information. Many other organisations whose primary function is not mass communication in the usual sense of the term, also possess their own facilities for disseminating information to local, national and international audience. It apppears that a number of corporations and

even religious groups, in US have their own telecommunication production and broadcast systems. Distance education will have these features sooner or later.

Audience research in mass communication in the areas of awareness, attitude, opinion, knowledge and behaviour of the public in specific issues of political, social and economic, cultural interests are undertaken by specialist institutions. The techniques employed in sampling, preparation of questions of common interests to analyse public reactions and opinions on specific issues and similar other is to throw flood lights on mass thinking, have been on the increase. These techniques with modifications can also be usefully employed by technical writers in certain categories of writing, especially while contributing to newspapers, script writing for television and broadcasting, to assess their impact on the audience and to discern the relationship that they may desire to cultivate with readers.

Self Check Exercise

6) Explain briefly how user studies can contribute to cultivating reader-writer relation-ship.

Note:

i) Write your answer in the space given below.

ii) Check your answer with the answers given at the end of this Unit.

4.7 SUMMARY

In this Unit, we have dealt with the reader-writer relationship in different contexts of technical writing. The focus of attention in this Unit are the following:

- The dual roles of generators and users in the communication transfer chain;
- Response and feedback for establishing reader-writer relationship in typical contexts like instructional writing, study/investigation reports, promotional materials and script writing for video programmes;
- Readability yardsticks with reference to formulas for providing guidance to technical writers; and
- User studies with a wider connotation to include citations analysis as a means of ensuring quality to technical writing; publishing trends, and mass communication that have relevance to cultivating reader-writer relationship in the context of technical writing.

4.8 ANSWERS TO SELF CHECK EXERCISES

1) In professional writings, generators and users of information, the writer community is more or less the same. A scientist, when writing a research paper, collects information from a variety of information sources which have already been written by some of his/ her peers, keeping abreast of current developments. In this way, they play a dual role in the communication transfer chain. We can

discern such implicit relationship between generators and uses in other writing situations also.

2) Direct response and feedback could be seen in the nature of personal contacts anion; the scientific community. Ideas and thoughts expressed by their writings are exchanges in personal meetings at coffee tables when they meet in conferences or seminars sometimes may be continued through correspondence.

   Technical writers could obtain indirect response and feedback through a variety o secondary and tertiary sources of information, citations practices and analysis, demand; for document delivery and others.

3) The three tests for obtaining feedback and response to instructional materials are (a; Readers' response to questionnaires; b) Performacne test and c) Testing simultaneously with readers. All these methods involve readers in the preparation of instructional manuals. The first test tries to obtain readers' response to set questionnaires. The data obtained are analysed to get proper feedback to improve the draft. The second test is to get readers' response through actual application of the manual. In this several draft versions could be simultaneously tested and the one that is acceptable to a majority is used for drafting and final version. The third test involves the readers in going through the document along with the writers and the necessary revisions or corrections are carried for the preparation of the final version.

4) The reader-writer relationship in instructional writing is a closer and well-established relationship in course materials, prepared for specific training programmes. It is a relationship between the taught and the teacher. Assessment of the impact of the course materials would be possible at different stages during the training programme. This facility lends the writer to recast or revise the text in tune with the needs of trainees. In the preparation of manuals and guides also, a close relationship between the writer and reader could be established by constant interaction at different drafting stages.

   In the case of study or investigation report writing, the work has to be done in close interaction with the organisation that sponsores such a study. Therefore there is deliberate interaction between the writers and users. The writer has to tune himself-herself totally with the requirements of the users.

   Promotional materials involve users in the preparation of ads and other types of product promotion brochures. Here again the interaction between the writer and reader is close.

   In the case of script writing for video programmes, the writer has to get select audience involvement at different stages of testing before the script is finalised to match the visuals.

5) Readability formulas are statistical measurements to reduce difficulties in readability. Words and sentences are related in a formula to establish the best readability of a draft. The use of these formulas has to be judiciously used not to sacrifice style and diction. They ought to be used as a guide only after the draft has been written, but not as a pattern before writing. Good writing must be alive and interesting, not dull and cloudy.

6) User studies as it is defined in this Unit, are those that relate to user centered services in library and information centres, publishing trends that use customers service as a dominate factor in book trade, and audience analysis in mass communication. In all these, interaction between the writer and reader or viewer is present directly or indirectly. Methodologies and techniques may vary in assessing user response and feedback in writing in these situations, but they are complementary and suplementary.

4.9 KEY WORDS

Communication Transfer Chain : The process of transfer of information from generators to users.

Feedback	:	Expressed comments on a technical document that help a writer to revise it to meet the requirement of users.
Peers	:	Persons who are quals having similar and same qualifications in field experience who interact and communicate among themselves.
Preprints	:	Research and technical papers circulated among peers even before they get published in formal publications.
Readability Yardstick	:	Research and technical papers circulated among peers even before they get published in formal publications.
Reader-writer Relationship	:	Relation between writers and readers that implicitly or explicitly exist in a writing situation.
Response	:	The behaviour and reactions of users to a piece of technical writing.

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