



Communication for Scientific Studies

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ABSTRACT

Appropriate use of language is necessary for communication. It is an art which can only be learnt by means of constant practice and proper guidance. The more you practice reduces the chances of committing mistakes. The desired message is conveyed for the achievement of expected result.

Keywords : Communication, technical field, specialized knowledge

Students related to scientific and technical fields have to be more careful and accurate in their work. Their communication is different than our day-to-day communication. Their focus is mainly on their work. They are more interested to talk and write about their work. The main difference between their way of communication and common mans communication is in the nature of the thing described. Whatever may be the subject described careful observation and selection is important but technical description is usually more difficult because clearness and exactness are even more important than in other kind of description. For example it is easy to describe bus stop, a classroom or a cinema hall. But when you describe an object or a machinery part you must exactly know what you are talking about. It would be useless to try to describe a clock or a water pump unless you had an adequate knowledge of how these things work. You must be a keen observer and selector in describing specific machine with additional, definite and specialized knowledge. This should be based on the clear understanding of the principal on which the object works. For example if you are describing a fuse wire, you must know the principal on which it works. You must know that it is the weakest part of an electric circuit. If any over loading occurs, the fuse wire breaks first, protecting the rest of the circuit. Whenever you are talking or writing or describing any object, it is advisable to start by making sure that you are clear about the principal on which it works. You must arrange your description in a logical sequence so that there is connectivity in the description, which enables the reader or the listener to understand the concept or idea clearly and easily. The best way to judge yourself is to put yourself in the place of the reader or the listener and ask yourself what kind of plan would give you the clearest picture, when you are describing an object you must remember, the name of the object, apparatus or machinery and the purpose for which is used or the basic principal on which it works. The very first sentence must describe the name of the object, which you have chosen for presentation and then description of the object. Divide the object into various parts, especially if the parts are made of different materials. The amount of detail depends upon the length of your description. Be careful that it must include everything essential. It must include purpose of the most important part, material of which it is made, size, shape, weight, colour, strength and durability.

As soon as you start your description it is advisable that do not give a list of important parts in the beginning because it may confuse you. There is a possibility of forgetting some part of your description. As soon as you name the important part start describing it. The description must concentrate on how the object works. To avoid confusion you must describe the

object separately and how it works separately. This will help to present your object clearly with confidence and without confusion. Illustrations play an important role when you deal with technical description. When you are reading or explaining some apparatus or a piece of machinery illustrations help you in same way as a diagram helps in written description. Always keep the illustrations brief and simple. Therefore the best place to keep the illustrations is before the written work and in the middle of the pages. Always you should begin the writing below the illustration. Your illustration must be large enough to be clear. Pencil should be used for illustration. Use the illustration to give various parts their names. When dealing with two or three things of same kind, these can be distinguished by labeling A, B, C etc. Illustration may be in the form of diagram or a section. The way of presentation depends what you are presenting and how you are presenting. In personal style the person doing the action is emphasized. In the impersonal style the emphasis is on an object or on some action, which is being, carried out. Description of simple object, tool etc is always wise to plan carefully. This means that you should prepare your work so that you should know what you are going to say and the order in which you are going to say it. It means that arranging your work in paragraphs knowing what the subject of each paragraph is going to be. First step is to name the object or a tool and its purpose. Second step is to describe its parts. Description of machinery is more difficult than description of simple objects and tools because here we have to explain how the machinery works. You can explain the machinery in three steps i.e. Name and purpose, description of parts and how it works. It is necessary to include a description of how it works if there are moving parts. We observe many things. Generally we are interested in things or jobs or object, which are distinctive or striking. The most suitable method for description of processes and occupation is introduction, materials required, procedure and conclusion. A useful plan for describing scientific principal is a clear statement of the principal on which the use of the object is based and a brief description of the object as an example of the principal.

To draw an object and to write about it are two different forms of description. Technical students should be able to translate drawing into writing and writing into drawing. They should be able to appreciate the essential points of drawing. They should be able to see how it fits together and visualize the actual object of which the drawing is representation. This ability is the aim of technical drawing and to realize the close links between English language and drawing may help to improve both. The following steps should be taken in describing drawing i.e. Brief introduction and a step-by-step detailed descrip-

tion. For better vision, clear thought and for effective explanation diagrammatic representation is must. It becomes easy for the reader to grasp and to understand ideas, thoughts more correctly and clearly with interest. Ultimately it widens the space for communication i.e. you are able to send desired message and the receiver is able to absorb the message according to your expectation i.e. in a correct format.

It will strengthen the communication process. Healthy communication will take the topic towards productive discussion. Ultimately it results towards the desired conclusion. Above-mentioned parameters will help the students to prepare more accurately for their project work, thesis, dissertations, seminars etc. It will give a guideline for their presentation.

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