The Language used in Science Communication

Dr U.M. Senanayake

There are number of areas involved in science communication. One has to pay attention to various segments of society, which are targeted for science communication. With regard to media, there are daily newspapers, weekend newspapers, periodicals and special news bulletins.

Science communications, which are published in daily newspapers often, have only news value. For example, if a new technique was found for food preservation, a daily newspaper could only give of information of news values. Sometimes, a feature article could be published in the same newspapers giving more in depth information such as the principles involved in the technique, types of food that can be preserved using the new techniques, how the taste, colour and nutrient values are preserved by the new technique, and the social benefits obtained by the new invention. This information is sufficient for the ordinary newsreaders.

If the same news is published in a weekend newspaper, attention has to be placed on its special merit value. There are trained science writers employed by most weekend newspapers. Such a writer could write a detailed article, perhaps with relevant photographs and diagrams, based on the original newspaper article. There are not only readers for such articles, but also collectors.

Once again if we take for example the above discovery, a special science article would have to contain more details on the technique, in addition to the basic principles. In describing such techniques, instead of using simple language, a more technical involving glossary terms, could be used.

There are readers in several age groups, and of different intellectual levels. There are children, ordinary school students, students in institutes of higher education, universities *etc*. There are also teachers and lectures. As such, there are special magazines, periodicals and even newspaper feature articles aimed at such segments of the society.

School students are a special segment receiving special attention. There are periodicals and other publications aimed at this sector. For such students, a simple language has to be used. The message is best understood by using lots of diagrams. In fact, there are some science magazines, which use cartoons to describe techniques and other features.

There is a special segment of readers in the adolescent age. These are the young boys and girls who may have finished their primary education. They may be either employed, seeking jobs or non-working. This segment of readers is seeking special knowledge. For these readers the language used should be not too simple or too hard. One will have to pay special attention to certain areas of knowledge, which they are seeking. Many girls like to read about beauty care, cookery, new fashions and styles, and health care. Many weekend newspapers

and periodicals carry special feature articles on these subjects. They also use a special language

in these articles. On the other hand, young men have different taste. They like to read about new techniques on motor mechanics, electronics, radio and television and similar fields. They seek this knowledge, not only to improve their knowledge but also to enhance their career opportunities.

There are professional journals and publications on science communications. There are trained journalists in this field. They perform two duties. They contact the relevant scientists and technologists for an interview. Such interviews are published as a professional article in these journals. The language used in these journals and periodical are of a high standard. There are scientists, researchers and technologists who write about their own discoveries. Often these articles are published as refereed journals with a special format. There are highly recognized journals of such category. Magazines like '**Discover**', '**New Scientist**' and '**Readers Digest**' and '**Scientific American**' are such examples. They are published in many languages.

In a recent '**Discover**' Magazine, the growth of grass leaves was described thus. "Unlike other leaves, a grass leaf grows from its bottom. Not from the top. When a leaf is cut by a machine or eaten by an animal from the top, the leaf achieves the original length by growing from the base of the leaf. The first grass cutting machine or the lawn mover was patented in England in 1830. Before this invention, lambs were employed to trim the lawn".

By using such a simple language any one with or without a science education can understand the scientific message. In science communication, it is very important to use simple language and correct meanings.

Famous magazines such as '**Time**', '**Newsweek** very often carry a science article. They are capable of describing a complicated or deep scientific or technical matter in a simple language that the layman can understand. The difference between reading and audio visual presentation is that, the reader will stop reading if he does not understand, but in the case of the audio visual presentation, even if the subject is unclear, one can continue to watch and listen.

There are specialized journals in science communication. Journals like, **Journal of Food Technology, Journal of Chemistry,** and **Journal of Phytochemistry** are such journals. Most of the science communication articles in these journals are of a research nature. There is a format for such articles. Often an article or paper describes the finding of a research project. The writer himself is the person who has carried out the research work. In such a scientific communication, the author himself describes the aim of the research project, the methodology used, the raw material used, the research, conclusions and summary. These journals, which could be monthly, quarterly or biannual, are for the science community. Even then such communications have to be written by trained journalists for the general public if they are to understand the scientific content. Such journalists will first have to understand the scientific content, and then use a simple language for the ordinary reader. Often, the first publication on a scientific discovery is published in a specialized journal. The science communicator will have to take the matter to the ordinary reader.