USE OF SYMBOLIC LANGUAGE IN TEACHING

(Training in Library Science 9)

The use of symbols is helpful in the communication of ideas. But the receiver's mind should be trained to accept, understand and apply symbolic language by mere reflex action. This requires individual training. In the formal class room atmosphere, this training is difficult if not impossible. Tutorial and extra-mural hours of intimate personal discussion is necessary: The Sanskrit term Anthevasi (=one living in intimate proximity) for "student" highlights this principle of individual instruction.

ABBREVIATION USED

PB: Participant-Botanist.
PE: Participant-Economist.
PM: Participant-Mathematician.
PP: Participant-Physicist.
T1: Teacher 1.
T2: Teacher 2.

INTRODUCTION

Symbolic language is helpful in teaching and in the communication of ideas. It provides a compact and precise means of communication among participants. It helps to bring to notice the basic or seminal idea underlying its several phenomenal manifestations. It avoids all the extraneous associations of the term in a natural language.

However, the prerequisites for the use of symbolic language in communication are that:

1. The participants understand the significance of the symbols in the context in which they are used; and
2. The receiver's mind is prepared to receive, assimilate and apply the symbolic language to the point of being a reflex action.

The case study described below bears testimony to this.

BACKGROUND TO THE CASE

In a recent colloquium held at the DRTC, the proposition was "Classification of documents in a library does not satisfy the Third Law of Library Science".

PM: (Presented the case).
PP: With the permission of the Chair, I suggest that the words "by itself" be added between "does not" and "satisfy" so that the discussion could be narrowed down to a particular aspect of the question under examination.
PM: The words suggested for addition are merely "puffs". The proposition as it stands implies what the modified proposition would express.

Based on actual classroom experience at the DRTC.
By a show of hands the amendment was lost.

After the discussion on the proposition, T1 was requested an opinion on the proceedings of the colloquium.

T1: The amendment suggested by PP was necessary. The implications of the proposition as it stands was not, however, properly presented by PP. The proposition as it stands can be interpreted to mean either:-

1. Classification is not necessary to satisfy the Third Law, or
2. Classification by itself is not sufficient to satisfy the Third Law.

To put the essence of the matter in symbols,

1. A is either not necessary to satisfy B, or
2. A by itself is not sufficient to satisfy B.

One could argue from both these angles unless the amendment suggested by PP is accepted. Surely, PM did not sense that the first alternative was also caught up in his proposition, though he did not intend it.

2 THE CASE

The day following the colloquium, there was an informal discussion among the teachers and the participants on the subject of "Rise of bureaucracy". In the course of the discussion PE threw in the statement that "Power overrides the sense of duty".

T1: Such mutilated sentences and mere stringing of some words do not make for clear and precise communication. It is distorted thereby. Scientific approach requires communication to be devoid of all emotional associations. The speech reflects the emotional work-up or agitated state of the speaker's mind. The ideas would then be clouded and distorted. In fact, speech even fails when one is overwhelmed by emotions. At the other extreme we have supreme souls such as Aurobindo and Ramanamaharsi, in whom speech may not be adequate to communicate their experience. Very often, in many contexts their silence speaks volumes. In normal communication, brevity of speech or writing can be secured by the use of symbols. For example, in explaining the implications of the proposition in yesterday's colloquium I substituted A and B for "Classification" and "Third Law" respectively.

T1 to PB: Did my substitution of A and B help you to grasp the implications better?

PB: My first reaction was that these mathematical symbols should not have been brought in, as I have little familiarity with them. But in a minute I was able to grasp the meaning and the substitution did not bother me.

T1 to PP: What was your reaction to my use of symbols yesterday and in regular teaching?

PP: Being a student of physics and mathematics, I am familiar with the use of symbolic language.

T1 to PE: What was your reaction?

PE: My first reaction was similar to that of PB. But I preferred to wait and see if I could follow. I felt that the teacher would not introduce a form of expression unless he has some purpose and good intentions behind it. It would, probably, be good for me in the long run. If afterwards the position did not improve, I thought I would oppose the use of symbols.

T1 to PB: Why do you not object to my use of symbols while teaching?

PB: (Silent).

T2: Would you have expressed your feelings against the introduction of symbols if it were not for the personality of T1 and also that he himself is asking you the question now?

PB: Yes, I would probably have objected, if it were not for T1.

3 INFERENCE

The case presented here indicates that although the participants are all postgradu-
ates some minds alone are accustomed to think in and are familiar with the use of symbolic language. To persons unfamiliar with it, even the mere substitution of a symbol for a term in the natural language appears to be an obstruction rather than a help, and makes them almost allergic to symbols. Even the small group of eight participants in the DRTC presents heterogeneity in this respect. Even in the case of the participants accustomed to symbolic language in their own field of academic studies, it has been found that they have not brought it up to a conscious level the advantages of the use of symbolic language in masking the associations of a term in the natural language not relevant to the Universe of Discourse. Therefore, the teacher cannot presume their familiarity with symbolic language and use it straight away. In the case of participants not accustomed to the use of symbolic language in their academic studies, the teacher would be making a great mistake if he uses symbolic language without preparing the participants to their use.

4 REMEDY

It takes several attempts for the response to symbolic language to be brought to the level of reflex action. By slow, graduated steps the unprepared minds should be made to take in and realise the advantages of symbolic language. Such a preparation should indeed begin even at the college when the student takes to serious studies in different disciplines. In the alternative, each student must be handled separately. This is possible in a tutorial system or when the teacher and the taught are in constant touch with each other and have extra-mural opportunities to spend as many hours as possible together in informal discussions. It is only in such informal situations that the student would feel free to express his difficulties, and the teacher can understand and meet the individual handicaps with sympathy. In formal classroom teaching, such personal attention may be neither possible nor desirable.

5 RESIDENTIAL INSTITUTION

This is the reason for any residential institution. It is to reap the advantages of close touch between the teachers and the taught that DRTC has been made a fully residential institution. This educational principle is well embedded in Indian heritage. The very term denoting "student" is Anthevasi. This term emphasizes that the student is one who lives in intimate proximity to his teacher.