

On Learning

Sometime in 2015

Learning is not same for each person even when they go through same course of education. One sees 'Ramu' has a unique base of knowledge from his background and connects the contents of the course in his own unique way. Hasmina on the other hand, coming from different social and cultural background absorbs the contents of same engineering course in quite a different way.

They do have a common understanding of the subject with which they respond in the examination of the subject.

There are 3 possibilities:

1. Both score same

We conclude both have learnt. (with that level of Marks though we normally forget the marks). If they have passed in the subject, we conclude they have learnt the subject. Even this conclusion has its own pitfalls. Ramu unlike Hasmina can leave one section of difficult part of the subject and still can pass, when he goes to next class if the content has a connection to the left out part then he gets into a problem!

2. Ramu has scored more than Hasmina

3. Hasmina has scored more than Ramu,

In these cases we conclude one is 'brighter' or more 'intelligent' than the other.

We do not conclude that one has learnt more than the other.

Coming back to the learning, Ramu or Hasmina when they connect the contents to their earlier knowledge base, the learning becomes 'meaningful' to them.

Such learning has a tendency to stay with the person for long or for ever. (Is it to do with the tacit learning?. Someone coined a word 'deep learning'. We will examine later). If the contents does not make connection with a deeper meaning, It is likely to be forgotten. Deeper meaning can be seen as meaning which connects to one's self-image or what makes that person to identify with himself/herself. Let us say Ramu connects his temple experience, sees the (steps of temple in the contents of the course) It can become his original creative

learning. But all the time we don't learn like that. Few significant learnings of each person may be of that kind. They can become the base for learning new things. (Darwin used 4 metaphors in developing his theory of survival of the fittest). Metaphoric mapping of new information on to the earlier data bank, or content or self (self itself is content) constitutes basic learning.

It is possible to see learning in the frame work of strong intense experience, like in Ramu's temple connection, or weak connections which are not deeply connected with self, like an Algebraic method of solving simultaneous equations. When people learn simultaneous equation with '2' variables and two equations (Or conditions) they normally remember the procedure to solve the equations. What one learns most of the time is how to make one of the variables equal in both equations by multiplying or dividing on both sides of the equations, (which is the 'learnt knowledge' that we can multiply or divide, add or subtract both sides of the equations and it remains same!) and eliminate one of the variables to find the numerical value of the other!. The basic learning of *solving a problem with two variables* still need not be understood. In my random tests with 'birds and plants' problem most of the architects and engineering graduates could not form the simultaneous equations.

So this may remain as a weak learning. If the equations get used again and again like in Engineering the procedure will be remembered. Person studying Arts or Commerce may even forget this procedure.

Thus weak learning may be just procedures, as it happens in algebraic learning and can depend on how one memorises. If these are not reminded for long they can be forgotten. If adequate 'memorizing Technique' has not been developed by the individual he/she may say the subject is difficult. Subjects like chemistry may demand large memory. If one does not develop an efficient creative mode of remembering, it becomes a difficult subject !