

# TEACHING AND LEARNING

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It should be stated at the outset that though a great deal of research has been done on the theory of learning in general, little progress has been made in relating what has been discovered in the psychological laboratory to the learning that goes on in the classroom. It is a fact to be regretted that, while the professional learning psychologist understands his own research, he has not always been able to provide satisfactory concepts for the teacher to understand and use.

No one seems to have succeeded as yet in analysing and defining all the factors involved in the complex mental operations that have to be performed by all students, both in established educational institutions and outside which for convenience we call the "learning process".

Even if a comprehensive and coherent body of tested facts and principles could be formulated, they would in all probability be too abstract, generalised and remote from the day-to-day needs of practising teachers to be of much use to them.

I must here refer to a useful study that has been made on these lines in a book entitled "Modern Methods in Elementary Education" edited by Merie M. Chlsen. In one of its chapters, the contributor has made a neat summary of some of the characteristics of the child who learns efficiently.

One of the first things he stresses is that a child who learns efficiently is free from disabling handicaps and distracting pain. He must be relatively free from worries and anxieties. He should also have sufficient energy to do his school work. It is well to begin by underlining such obvious considerations. Learning does not take place in a vacuum.

Certain essential social and physical conditions will have to be fulfilled before a child can partici-

pate effectively in the work of learning. Children who are underfed and badly clothed, and who are harassed by financial difficulties and other domestic problems of various kinds, cannot be expected to devote their whole minds to their tasks at school.

As a rule, children learn most efficiently - when (a) they want to learn (b) know what they are expected to do (c) believe that they have the ability to do it, and (d) recognise some value in doing it.

The child's general attitude towards himself, his previous school experiences, and especially - his memory of success or failure in doing similar work, will determine his decision whether he can or cannot do the work. His interest in doing the work will be determined by the attitudes he has learned, both in and outside school.

In all learning children must have a motive to help them to attend keenly and remember well. An essential motive for a learner is an interest in his own progress so that he continually sets himself a higher goal. It is extremely important for successful learning that pupils should keenly want to learn.

They should be inspired by the strong motives of interest and purpose: if possible a direct, lively interest in the subject, and in any case a clear realisation that the learning has a worthwhile purpose, either now or in the future. They, then, attend whole heartedly to the work.

Learning with insight, intelligent learning is the most effective learning; and it may occasionally be so effective that no repetition is needed to clinch the process and make the result permanent. No external reward is needed to reinforce it, for the joy of learning is its own reward.

All learning is however, not carried on with insight and intelligence quite often the student has to resort to purely rote learning. In such learning, the learner is given a stimulus and a response, e.g. nine sevens

(stimulus) sixty three (response). He then repeats sixty three in response to nine sevens until the stimulus and response have become firmly associated.

When the learning is tested, the right response is reinforced by a 'reward' such as a teacher's smile or approval; and wrong responses are weakened by a punishment such as a teacher's rejection of the wrong answer.

In purely rote learning, the learner is given the right response; in purely intelligent learning he discovers it by thinking. Between these extremes there are of course many gradations.

Conditions which facilitate learning

Good morale facilitates learning. The teacher's personality is an important factor in determining pupil morale and classroom climate. Some of the personal and professional qualities that make for a teacher's success with his pupils are noted below.

## Quality

\*His ability to accept himself and others (especially pupils, parents and colleagues);

\*His ability to communicate this acceptance of others;

\*His capacity for entering into and appreciating the emotions, attitudes, points of view and experiences of others;

\*His skill in sensing pupils difficulties and communicating a genuine desire to provide assistance;

\*His ability to cope with his own emotional problems;

\*His mastery of the subject matter he teaches;

\*His ability to communicate his ideas and feelings to others;

\*His ability to accept and profit from criticism, and his interest in improving his teaching methods.

\* "Teaching means" causing to learn. Nothing has been given until it has been taken; Nothing has been

taught until it has been learnt. In other words, teaching does not occur unless learning takes place. A knowledge of how children learn is the first essential for success in teaching.

We help children in school to develop intellect, character, skill, taste and sociability. We teach them knowledge, habits, ideals, skills attitudes, manners. In other words, we help them to adjust themselves to their environments - spiritual, social and material.

According to this view of education as adjustment, teachers are subsidiary to the process of learning, for in this process there are two factors - the child, on the one hand, and his world on the other. The teacher's function is to bring the two into contact.

We bring to bear various teaching devices with a view to producing a "flash" between each child and some part of his environment. The essential activity is not the adjustment of the child to the teacher but of the child to the world.

It is a fact universally recognised that the best time to teach children is when they feel the need for being taught. A teacher who can stimulate his pupils so that they want to learn is, therefore well on the way towards mastering the art of teaching.

One method of doing this is by arranging that children learn through practical activities that are intrinsically interesting.

Another method of inciting children is by giving them a problem to solve.

A third method of producing conditions in which children want to be taught is by selecting subject matter that appeals to their natural interests. We know a good deal about how children learn, but much less about what children of various ages ought to be learning. There is a need for reconsideration of the content of the subjects we teach.

The goal of any school programme is to help the student develop intelligent and adequate behaviour. Before a person can become effective, his behaviour must change. The best way to change behaviour is to change the individual's perceptual field,

bringing about changes in the individual's perception of himself and his perception of his environment.

### Success

In this process of changing the perceptual field, it is essential that there be a maximum of challenge with a minimum of threat in the school programme. One develops a feeling of success and adequacy if one has the opportunity to experience success and to feel accepted. Habit, thus becomes the result of success rather than the result of repetition.

There are three traditional ways in which the teacher carries on the function of instruction. First, there is the oral or talking method, which covers the whole range from telling a story to a group of pre-school children to presenting a lecture to a large audience of University students.

The straight-lecture approach is appropriate as an instructional technique if the class has enough anxiety to want to hear what the lecturer has to say.

Demonstration (guidance) or "showing how" technique is another instructional method. It is easier to develop correct habits at the beginning than to develop bad habits and - then have to unlearn them!

Imitation is another instructional method. It is reasonable to expect that if hand-writing is being taught, the teacher should be able to write well on the blackboard.

We have so far, dealt with the subject on broad and general lines of more or less conventional nature. It is, perhaps, desirable at this stage to look at the question from a slightly different angle, that is to say, in its bearings on the needs of the kind of society that prevails in our country today and seems likely to develop during the years immediately ahead.

In such a set-up, the function of the teacher will be that of stimulating and encouraging students to make their own discoveries. Institutions for teacher

education have a large part to play in producing the kind of conditions we have in mind. Teaching has been described as the noblest of occupations. It is noble only when students acquire noble ideas and ideals, and when what is learnt is relevant to the problems of the students' world.

The content of education is ever changing, and it is always new to each individual. A problem facing teachers today is, whether they are teaching only for perpetuation of society as it exists now, or whether they are so to teach that their students can make their contributions to the development of a better society.

One of the surest ways of promoting the mental growth of children so as to make them useful and responsible citizens, with a capacity for independent and constructive thought, is by evoking and nourishing their sense of wonder.

The point of view I have just tried to put forward has been expressed with admirable force and clarity by Prof. S.N. Arsecularatne, Head of the Dept. of Microbiology, Faculty of Medicine, University of Peradeniya, in the keynote address he delivered recently at a workshop on "Development of Teacher - Pupil Rapport and Creative Thinking".

He points out that the fostering of creativity is not a part of our educational system, which appears to be one of passive conditioning rather than of stimulation. It is often "little more than a selection device for picking out clever conformists".

Even in the West, there has been a feeling that current educational systems unduly favour the conformist mentality and discourage spontaneous and independent thought among those children or students who might make future original contributions to the arts, sciences and technology.

He quotes a Chinese proverb which seems to go to the heart of the matter - "If you give a man a fish he has just one meal, but if you teach him how to fish, he will have many meals" ●