

Phases of Skill learning

Objectives: At the end of this lesson you shall be able to

- analyse the seven steps method of transfer of skill
- explain the three phases of skill learning
- explain the process of acquiring the skill.

Skills vary widely in type and complexity; the learning process that individuals go through when acquiring various motor skills is similar.

The physical skill could be learnt by “simply watching and doing”. This way the skill is transferred from father to son, which happens when son’s hand is held and taken to the place of work. Many employers prefer this method. As this way they could expertise certain contact over their employees and partly because there is no systematic study about how the skill could be transferred.

It was **Seymour Brothers** (1954) who introduced to breakdown the job into several parts as key points and prescribed seven steps method of transfer of skill.

- Show the learners how to do it.
- Explain the key points.
- Let them watch, you do it again.
- Let them do the simple and complex parts of the job separately (Imitation)
- Help them to do the whole job (Linking)
- Let them do the whole job, but watch again (Refinement)
- Put them on the job for their own practice (Practice)

True and complete learning is said to comprise three different phases. These are phase of Acquisition of Retention and lastly the phase of Recall.

Acquisition phase

This phase of learning means to make impressions on the mind. Attention and perception, these are the two main factors involved in this stage of learning. Perception does not merely means seeing an object but seeing it with meaning. How much an individual does learn depend upon his perception and the amount of attention he has paid to the learning situation.

When the individual is motivated to the learning situation through inner drive, desire, need and use his attention is automatically voluntary. For example one’s interest in gramophone, radio, television etc. may motivate him to learn science. When external motivation and incentive (Prize or reward) are used for the learner to learn, then the attention that he gives to the learning situation may

be called on involuntary one. Both kinds of motivation are useful for the purpose of acquisition in a learning situation.

So far as perception is concerned, it is said by the psychologist that one should possess the capacity to receive and learn the things that the teacher wants to teach him. This is known as one’s mental set or readiness to learn. This psychological readiness on the part of the individual is pre-requisite to the acquiring of any kind of learning. It is often said “you may take a horse to the drinking pool but it depends on the horse whether it wants to drink water or not.

Phase of Retention

It is a fact that one tends to forget things he has learnt if he does not use them. In this connection, psychologists have recommended over learning as opposed to under-learning. Many things are remembered almost for the entire life time of an individual if these have been over-learned. This means that the materials have to be drilled and repeated OFF and ON. In view of the above it is clear that one should not be satisfied with the minimum amount of study but drill oneself beyond the level of just recall for remembering things. Another important factor which affect retention, is the meaningful organisation of the material. The meaningful the material, the more it is retained.

Application phase

The third phase of learning is called recall. Learning is said to be complete only when the learner, can recall the material from memory when it is needed. In this connection, Aristotle propagate his principle of contiguity as follows:

If a thing is to be recalled, it must be associated contiguously with something else. If it is to be recalled, it must be recalled contiguously with the former associated idea, which means that our experiences are not stored up in the mind in a crude unrelated way. They are tied up together in accordance with certain mental principles.

The principles of recall to memory may be explained through the laws of association, laws of similarity and laws of contrast. Similar ideas get associated together, so also any idea tends to suggest to its opposite.

Three phases of Skill learning

As our knowledge about the skill goes further we gradually understand that development of physical skill takes place under three distinct phases. They are as follows:

- Cognitive phase
- Fixation phase
- Autonomous phase

Cognitive phase

What should be done, to what purpose, in what sequence and how. In this phase the learners under the guidance of the Instructor develops the related knowledge (theory) in executing the skill. The learner has to observe the skill which he has to do later, the Instructor described "What to do, how to do and what are the safety points to be observed while doing the skill". The Instructor also will explain the sequential procedures by which skill can be completed with minimum error. In this phase the Instructor demonstrates the skill so as to show the learner's systematic way of doing the skill.

Fixation phase

In this phase the learners learn the correct behaviour without making any mistakes through a number of repetitions. Correct behavioural patterns are practiced with the change of making incorrect responses is reduced to 'Zero Error'. Thus, the behaviour of the learner or the systematic way of doing the skill is fixed. The coordination of conceptual and motor skills will help to develop better result in doing the skill, executing the action and response to reaction in a step by step manner.

At this stage there is conscious application of knowledge, "What to do and how to do" aspects of operation are "Controlled" - "When to do" and "How well done" aspects of operation develops through practice. This phase leads the learners to the autonomous phase.

Autonomous phase

In this phase the learner learns to perform his job independently without error and within the stipulated time (with correct speed). The learner gets a self confidence and characterized by the reduction of the need for conscious attention and thinking of the action. The skill becomes almost a set of reflexion - one triggering of the next without much effort, being called for from the worker. In this phase the learner gets the expertness and attains a better performance of the skill. Performance of all the aspects - the skill becomes automatic.

Skill Learning

Process of acquiring the skill

Skill can be acquired only after undergoing a practical training. In vocational training the skill related theory will be taught first. Next, the Instructor will demonstrate the skill elements systematically with safety precautions to follow in handling the tools, instruments, equipments, machineries etc. in a sequential order. After that the trainees will be asked to perform the skill. In order to enable the trainees to do the task assigned in a proper manner they must pass the stages of observation participation, imitation and repetition. These are explained below.

Observation

First stage is observation stage. The instructor first demonstrates the operation of particular machine. The trainee's job here is only to observe the demonstration. The instructor's action will be observed very keenly at this stage and hence care must be taken not committing errors. Trainees should observe the following:

- What is being demonstrated?
- The method of performing a skill.
- Techniques of performing the operation.
- Correct way of handling tools & equipments.
- Safety precautions to be followed.

Participation

This is the stage of association. Here the trainees will be given an opportunity to handle the tools/raw materials used in the demonstration. The instructor will give the guidance only when necessary. This will develop their ability to handle/use the tools etc and also to work in a group with confidence.

Imitation

In this stage the learners try to imitate the instructor. This will be their first experience of doing any job and there may be a possibility of mistake being committed. The instructor should guide the trainees at this stage. Otherwise they are likely to form or follow bad or wrong habits. The most important thing that an instructor has to keep in mind is that imitation must be arranged immediately, without which the trainees tend to forget what they observe.

Repetition

In the imitation stage with proper guidance of an instructor the trainees learn proper method and technique of practical work. But for perfection, speed and accuracy they have to repeat it again and again. So repetition plays an important role while acquiring and mastering the skill.