

LESSON 7

PRINCIPLES OF EFFECTIVE TRAINING AND LEARNING

Dear Friends,

Now you already know about training & development as well as its significance .

In this lesson we will go through some principles of training and learning. You will also be able to correlate how it contributes in making training success.

As defined by a famous author training is learning process. Hence to make training effective and successful one must understand about learning and training principles. In previous chapters you have studied about learning, learning styles & strategies, types of learning , learning process.

Learning and Teaching

The training programme will not be effective if the trainer is poorly qualified or ill-equipped with the technical aspects of the content or if he lacks aptitude for teaching and teaching skills. Training comprises of mainly learning and teaching. Training principles can be studied through the principles of learning and principles of teaching.

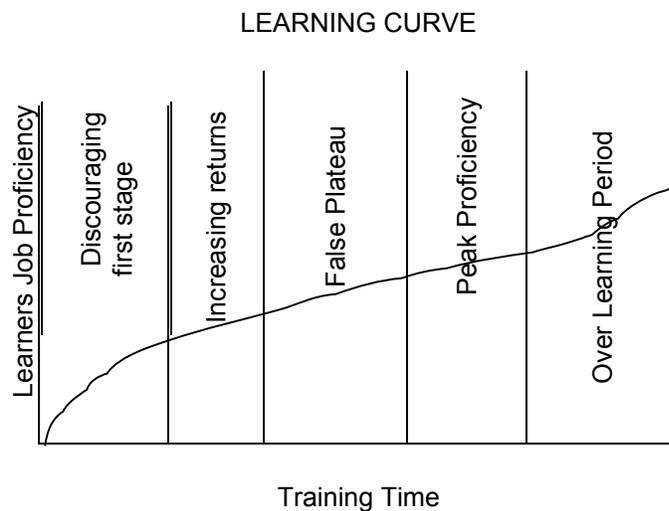
Learning Principles

1. Learning requires purposeful activity.
2. Learning is a process of the whole individual.
3. Learning is problem solving. Challenging problems stimulate learning.
4. Learning is based on past experiences.
5. Learning results from stimulation through the senses.
6. The more vivid and intense the impressions, the greater the chance of remembering.
7. Interest is essential to effective learning. Learning requires motivation.
8. Friendly competition stimulates learning.
9. Recognition and credit provide strong incentives for learning.
10. People learn more when they are held to account and made to feel responsible for learning.
11. Knowing 'why' makes learning more effective.
12. Knowledge of the standards required makes learning more effective.
13. Things should be taught the way they are to be used.
14. Teaching should be logical or orderly.
15. The most effective learning results when initial learning is followed immediately by application.
16. Early successes increase chances for effective learning.
17. Repetition, accompanied by constant effort toward improvement, makes for

- effective development of skill.
18. Feelings of both teacher and student affect learning.
 19. Students learn many things in addition to skills and information (attitudes, interests, appreciations, etc.)
 20. Continuous evaluation is essential to effective learning.

Learning Patterns

Trainers need some understanding of the patterns in which new skills are learned. The employee is likely to find himself unusually clumsy, during the early stages of learning. This can be called discouraging stage. After the employees adjusts himself to the environment, he learns at a fast rate. A 'plateau' develops after the lapse of more training time due to a loss of motivation and lack of break in training schedule and time. The trainee reaches the next stage when he is motivated by the trainer and/or some break or pause in time and training process is given. The trainee at this stage learns at a fast rate. Special repetition of the course leads the trainee to reach the stage of over-learning as shown in below diagram.

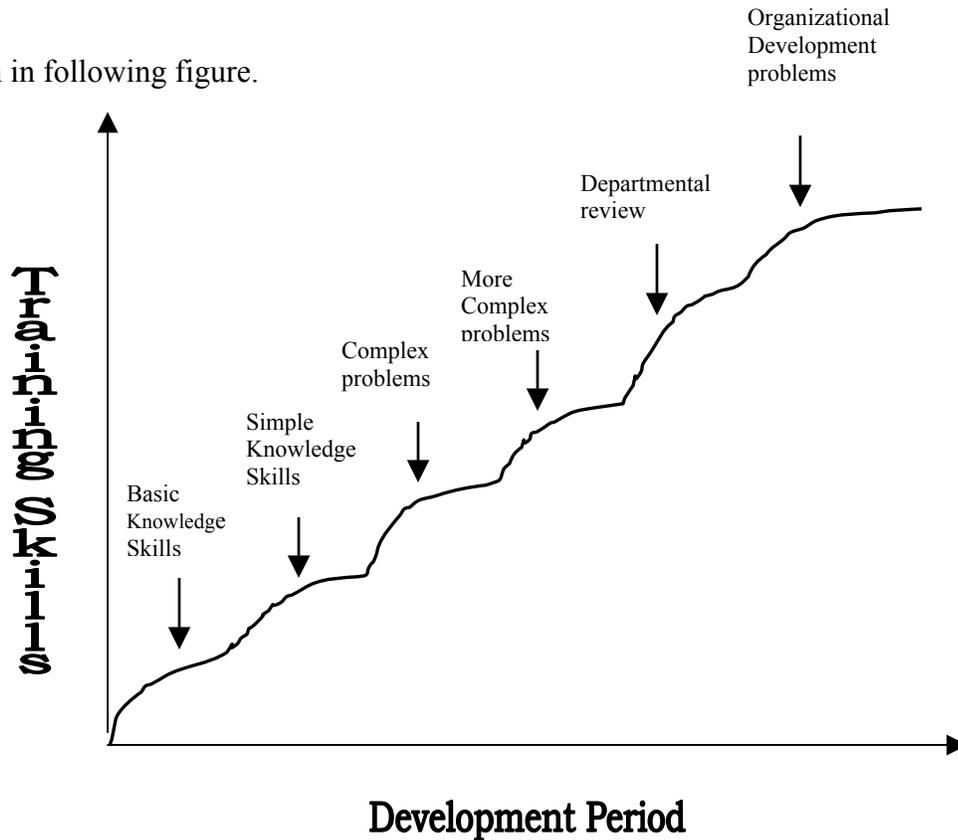


Thus, it is clear that, learning rarely takes place at a constant rate. It varies according to the difficulty of the task, ability of the individual and physical factors. However, the rate of learning varies from one individual to another.

Characteristics of Learning Process

- (1) Learning is a continuous process.
- (2) People learn through their actual personal experience, simulated experience and (rom others experience (by using the knowledge which represents experience of others).
- (3) People learn step by step, from known to unknown and simple to complex as

shown in following figure.



- (4) There is a need for repetition in teaching to improve skill and to learn perfectly.
- (5) Practice makes a man perfect. Hence, opportunity should be created to use, transfer the skills, knowledge and abilities acquired through learning. It gives satisfaction to the learner.
- (6) Conflicts in learning: Conflict in learning arises when the learner knows or has developed some habits which are incorrect in terms of the method being learned.

The Climate for Learning

Conducive climate is highly essential for serious participation, attentiveness, creation of interest, and sincerity of learner. Climate for learning consists of working conditions, relationship with other trainees, and trainers/instructors, conditions for relaxation, freedom, scope for social interaction, and formation of social groups. Conducive climate for learning should be provided in view of its significance in training. It consists of ideal physical and psychological environment. Ideal physical environment, consisting of suitable location with space, adequate accommodation, audio-visual aids, air conditioning, ventilation, lighting and other facilities like canteen, facilities for relaxation, should be provided. Ideal psychological environment, consisting of business atmosphere, friendly environment, frequent communication, follow-up regarding performance and progress, enthusiastic, helpful and broad minded trainer etc., should be created

and provided. Provision for measuring teamer's progress through tests should also be made in order to regulate, correct and follow-up the training programmes.

Learning Problems.

The instructor should have the knowledge of the possible learning problems. He should identify the problems of trainees and take steps to solve them. The possible learning problems are:

- (a) Lack of knowledge, skill, aptitude and favourable attitude.
- (b) Knowledge and skill not being adopted.
- (c) Existence of anti-learning factors: Most tJperational situations contain. A number of elements which will restrict the development of learning regardless the methods employed.
- (d) Psychological problems like fear and shy,
- (e) Inability to transfer of learning to operatiton situation.
- (l) Heavy dependence on repetition, demonstration and practice.
- (g) Unwilling to change.
- (h) Lack of interest about the knowledge of results.
- (i) Absence of self-motivation.
- o) Negative attitude about involvement and participation.

Teaching Principles

In addition to learning principles, teaching principles should also be taken care for effective training:

- (a) The employee must be taught to practice only the correct method of work.
- (b) Job analysis and motion study techniques should be used.
- (c) Job training under actual working conditions should be preferred to class room b:aining.
- (d) Emphasis should be given more on accuracy than speed.
- (e) Teaching should be at different time-intervals.
- (l) It should be recognised that it is easier to train young workers than old workers due to their decreasing adaptability with the increase in age. Exhibit 8.6 shows principles of teaching basic skills and Exhibit 8.7 shows principles of teaching basic Physical Movements.

Principles of Teaching Basic Skills

1. The worker must be taught and must practice only correct methods of work. This is the basic principle.
2. First establish the best way of doing a job - use job analysis and/or time and motion study techniques.
3. Follow the principles of best movements in work.
4. Job training under actual working conditions is superior to classroom and formal training.

5. Emphasise *accuracy* first - speed second.
6. Training is more efficient when distributed over short periods of time.
7. Remember the practice aims - efficiency increases with repetition of the task. However, you should expect learning plateaus when no apparent progress is made, followed by additional spurts of improvement. Therefore, you should carry out distributed practice over longer period than is commonly believed (otherwise workers settle down at production speeds lower than their real abilities).
8. *When* a plateau is reached, use incentives and other devices to get *more* improvement.
9. Age and learning: You can train older workers as well as younger ones. Learning ability does not deteriorate rapidly with age - in stead, older workers have learned more bad habits and therefore need retaining. .

Principles of Teaching Basic Physical Movements

1. Successive movements should be so related that one movement passes easily into that which follows, each ending in a position favourable for the beginning of the next movement.
2. The order of movements should be so arranged that little direct attention is needed for passage from one to another. In other words, they should be so arranged that the mind can attend to the final aim or end of the operation instead of being distracted by the work of initiating successively the several movements which are involved in a task.
3. The sequence of movements is to be so framed that an easy rhythm can be established in the automatic performance of the various elements of operation.
4. From the principles which have been stated follows the corollary that a continuous movement is preferable to angular movements involving sudden changes in the direction of movement.
5. The number of movements should be reduced as far as possible within the scope of limitations suggested above. In general, reducing the number of movements will facilitate a rhythmic method of working and automatisation as a means of reducing the volitional direction of work.
6. Simultaneous use of both hands should be encouraged.
7. When a forcible stroke is required, the direction of movement and placement of material should be so arranged that, as far as practicable, the stroke is delivered when it has reached its greatest momentum.

PRINCIPLES OF TRAINING

Providing training in the knowledge of different skills is a complex process. A number of principles have been evolved which can be followed as guidelines by the trainees. Some of them are as follows:

- (1) *Motivation*: As the effectiveness of an employee depends on how well he is

motivated by management, the effectiveness of learning also depends on motivation. In other words, the trainee will acquire a new skill or knowledge thoroughly and quickly if he or she is highly motivated. Thus, the training must be related to the desires of the trainee such as more wages or better job, recognition, status, promotion etc. The trainer should find out the proper ways to motivate experienced employees who are already enjoying better facilities in case of re-training.

(2) *Progress Information*: It has been found by various research studies that there is a relation between learning rapidly and effectively and providing right information specifically, and as such the trainer should not give excessive information or information that can be misinterpreted. The trainee also wants to learn a new skill without much difficulty and without handing too much or receiving excessive information or wrong type of progressive information. So, the trainer has to provide only the required amount of progressive information specifically to the trainee.

(3) *Reinforcement*: The effectiveness of the trainee in learning new skills or acquiring new knowledge should be reinforced by means of rewards and punishments. Examples of positive reinforcement are promotions, rise in pay, praise etc. Punishments are also called negative reinforcements. Management should take care to award the successful trainees.

The management can punish the trainees whose behaviour is undesirable. But the consequences of such punishments have their long-run ill effect on the trainer as well as on the management. Hence, the management should take much care in case of negative reinforcements.

(4) *Practice*: A trainee should actively participate in the training programmes in order to make the learning programme an effective one. Continuous and long practice is highly essential for effective learning. Jobs are broken down into elements from which the fundamental physical, sensory and mental skills are extracted. Training exercises should be provided for each skill.

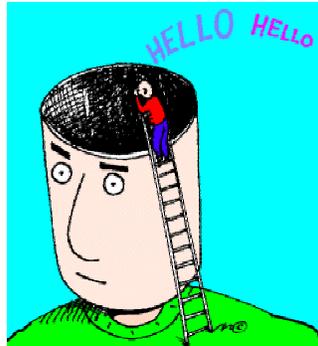
(5) *Full Vs. Part*: It is not clear whether it is best to teach the complete job at a stretch or dividing the job into parts and teaching each part at a time. If the job is complex and requires a little too long to learn, it is better to teach part of the job separately and then put the parts together into an effective complete job. Generally the training process should start from the known and proceed to the unknown and from the easy to the difficult when parts are taught. However, the trainer has to teach the trainees based on his judgement on their motivation and convenience.

(6) *Individual Differences*: Individual training is costly, and group training is economically viable and advantageous to the organisation. But individuals vary in intelligence and aptitude from person to person. So the trainer has to adjust the training programme to the individual abilities and aptitude. In addition, individual teaching machines and adjustments of differences should be provided.

ARTICLE:

What Can I Do To Increase the Effectiveness of the Learning Experience? Affective Behaviors

Getting someone to change their affective behavior is one of the hardest tasks to accomplish. That is because the training often threatens the learners' self-image. So, it becomes important to affirm the learner's core values, such as moral, social, religious, family, political, etc. Learners who attend training in which their beliefs or values are supported are much more likely to "let down their guard" and accept the learning points.



If you confront the learners with learning points that suggests they may have acted in a foolish or in a dangerous manner, they become resistant to change. No one wants to be told that they did something stupid. Thus, it is important to remind them of their "goodness" in order to make the various learning points easier to digest. The learning will not be so threatening because thinking about an important value will have affirmed each learner's image of himself or herself as a smart and capable person. This also points out the invalid concept of a learner as an empty vessel. You have to "draw" them into the learning, not simply "pour" the learning into them.

Why is safety so hard to train?

(NOTE: The following example uses safety, but this method works with a wide variety of affective behaviors.

Unlike a lot of other tasks, it is often easier to do something the unsafe way, rather than the safe way. For example, if I run out of charcoal lighter, it is much easier and quicker to use the can of gasoline in the garage than drive two miles to the nearest store; it is much quicker to cross in the middle of the street than walk to the corner-crosswalk; it is faster and easier to jump on a piece of equipment and start operating than to perform some checks beforehand.

Getting someone to act safely requires that they not only gain the required knowledge and skills, but that they also change their attitude (affective domain). Otherwise, they will know how to act, but will not do so as their self-systems kick in and convince them to do it the fast and easy way.

We all perform calculated risks (which in reality are unsafe acts to various degrees), e.g., I might never use gasoline to start a barbecue (unless I was starving and had no means to get fluid), but I might cross the street outside of the crosswalk if it was not busy.

This is why organizations have safety class after safety class - they never getting around to changing the attitudes of the learners. They hope that drilling the same old knowledge and skills into the learners with various methods will eventually pay off and produce safe learners. However safety requires that we know the rules (knowledge), know how to act (skills), and have a proper attitude for it (affective).

One Solution

A learning program might go something like this (I am keeping this simple so that you can add, remove, or adjust the steps for other behaviors):



Have each learner explain three or four safety rules or principles that they value dearly and why. Also, have them record their selections on a flip chart.



This helps to internalize the belief that they are "good" persons, which makes them more receptive to change. This is best done in small groups (mix the groups up throughout the various activities).



Sort of like "cheerleading."



Gather the groups back together and have them discuss their values or principles. Tape these values to the walls so that they may be used for further reminders.



Discuss the concept of the difficulty of getting people to act safely (e.g. it is often quicker and easier not to act in a safe manner).

Again, using small groups, have them discuss calculated risks (unsafe acts) that they have performed, e.g., not coming to a complete stop at a stop sign. Have them record the reasons on a flipchart.

Next, have them confront the inappropriate behaviors by asking why we take these risks when they might clash with our core values and principles. (Note: You can have them discuss a number of other things depending on your desired outcome - e.g. discuss if the reasons they listed for taking the "risks" are the same reasons other employees might use. If not, what might some of their reasons be?)

Gather them back together and using their input, extract the central themes of their discussions.

Have them brainstorm some activities or solutions that they can use in their workplace to make it a safer place (this allows them to become part of the solution). For ideas on brainstorming activities.

Changing Affective Behaviors Is Not Easy

Note that changing affective behaviors is generally not a one shot activity. But, going to the core of the matter is better than repeating the same old skills and knowledge that they already understand. Building a wide variety of these "cheerleading" activities will give you the three required building blocks of learning difficult behaviors:

Gaining new *skills*,

learning new *knowledge*,

and changing Affective behaviors.

Now think , discuss and write your conclusion about following:

1. What are learning principles?

2. Explain the important Learning and training principles.

3. Discuss how teaching is different that training.

4. List down the principles of training.

ALSO REFER TO THE PRESENTATION FOLLOWED BY THE LESSON