

**B.A. 6<sup>TH</sup> SEM (Education)(Gen.)**

**Paper: Educational Technology (6.1)**

**Topic: Instructional Technology  
(*Fundamental Principles of P.I.+  
Merits and Demerits of P.I.*)**

---

**Ajanta Saikia**  
Associate Professor,  
Deptt. Of Education,  
S.B.Deorah College, Guwahati

# Fundamental Principles Of Programmed Learning

- 1. Principle of small steps:** This principle is based on the basic assumption that the learner learns better if the context matter is presented to him in suitable small steps. Therefore, while preparing the programme, the programmer should try to arrange the subject matter into a properly sequenced and meaningful segment (steps) of information known as FRAMES. These segments should be presented one at a time before the active responding of the learner.

## 2. Principle of active responding :

- In programmed learning the learner can take part actively in the classroom teaching learning process.
- Here the learners are required to respond continuously to the frame presented to them.
- They don't get any problem in moving from one frame to another and remain active by responding to the frame and acquire the knowledge step by step.

### 3.Principle of immediate reinforcement:

- This principle is based on the psychological phenomena of reinforcement .
- The learner learns better when he is motivated to learn by receiving the information of the result immediately after responding.
- Therefore good programme should be based on the principles of re-enforcement through which the learner learns better and he learns immediately whether his answer is correct.

## 4. Principle of Self Pacing:

- Programmed learning is highly individualized technique. It is based on the basic assumption that learning can take place better if the learner is allowed to learn at his own pace.
- Therefore a good programme should always give importance to the principle of self pacing.
- 
- The programming of the materials should be done on the basis of the principle of individual difference so that the learner may be able to respond and move from one frame to another according to his/her own speed of learning.

## 5. Principles of Student testing:

- For success of learning, continuous evaluation of the learners is very essential. So, there is the need of principles of Student testing.
- In programme learning, the learner has to leave the record of his response because he is required to write a response for each frame on a response sheet.
- Whenever there are more wrong answers the programmer can detect the reasons and accordingly he tries to revise and improve the programme.

# Merits of P.I.

1. Programmed learning is one suitable media of individualized instruction. In this technology, importance is given to the needs and ability of the learner. The scope of self pacing gives the chance to the learners for learning with their own speed.
2. There is an immediate reinforcement which can motivate the learners for their subsequent stage of learning.
3. It can free the teacher from larger load of work of the learners and devote their time to creative and constructive activities.

- 4 . P.I. proves an effective teaching strategy because in it, content may be thoroughly analyzed and presented in a suitable steps and logical sequences. Instructional objective are properly set and feedback is properly provided.
5. It can effectively used in guidance and remedial instruction.
6. It helps to develop the scientific and logical attitude of the learners.
7. It involves both learning and evaluation. Therefore it can help auto-learning and auto-evaluation of the learners.



# Demerits of P.I.

1. In programmed learning, the role of the teacher is minimum.
2. There is no chance for learner's creativity, their response are highly structured.
3. There is the need of trained and efficient person for preparing the instruction for programme learning . This is not possible for a general teacher.
4. In P.I. there is a tight schedule of the time table. Therefore It is difficult for the learner to learn the content matter in a limited period of time.
5. Programme learning gives emphasis only on fulfillment of cognitive objectives of the learners.

# Bibliography

Prepared with inputs from:

1. Essentials of Educational Technology by S.K.Mangal & Uma Mangal
2. Educational Technology by Dr. Phunu Das Sarmah and Dr. Tarali Pathak