Quadrant II - Notes

Paper Code: EDU – 02 (for B.Ed) , BSBAEDU 02 (for B.Sc.B.Ed / B.A.B.Ed)

Module Name: Relevance of Learning Theories and Classroom Implications –

Gagne's Hierarchy of Learning

Module No: 20

Introduction:

Robert M.Gagne , an American psychologist classified different types of learning in terms of their degree of complexity. He observed that even when favorable conditions were provided, the learner failed to give positive results. Infact, he had to learn the following:

> ➢ what it was to look for,

> ➢ what was to be done,

> ➢ what classes of situations were likely to be encountered.

Gagne felt that," People do not learn in a general sense, but always in the sense of a change in behaviour that can be described in terms of an observable type of human performance."

Gagne's Definition of Learning:

Gagne defines learning as, a *change in human disposition or capability, which* can be retained, and which is not simply ascribable to the process of growth."

Thus, as per Gagne, learning is a process which exhibits itself as a change in observable behaviour that takes place under certain observable conditions.

Two types of Conditions for Learning:

1.Internal Conditions : These refer to the internal state of the learner – e.g.: attention, motivation, and recall.

2.External Conditions: These refer to factors that surround one's behaviour, and include the arrangement and timing of stimulus events.

Gagne's Hierarchy of Learning:

Gagne proposed that all learning was not alike. He divided learning into eight types of learning. He arranged these into a hierarchy.

Gagne's eight types of learning are as follows:

Type.1. Signal Learning: This is the simplest form of learning and consists essentially of classical conditioning. In this, the subject is conditioned to emit a desired response as a result of a stimulus that would not normally produce that response.

Type .2. Stimulus – Response Learning: *This* is a little more complex, and is Instrumental conditioning (Operant Conditioning) of Thorndike. It is the process of response modification or discrimination

Type.3. Chaining: **Gagne says,** "By chaining is meant the connection of a set of individual S's   R's in a sequence. Two or more stimulus responses are joined together.

Type.4. Verbal Association: This is a form of chaining in which links between the items being connected are verbal in nature.

Type.5. Discrimination Learning: This involves developing the ability to make appropriate (different) responses to a series of similar stimuli that differ in a systematic way.E. g a child learns to make different responses to each printed letter of the alphabet.

Type.6. Concept Learning: This involves developing the ability to make a consistent response to different stimuli that form a common category. It forms the basis to generalize, classify, etc.

Type.7. Rule learning: This is a very high level cognitive process that involves the ability to learn relationships between concepts and apply them in different situations., If 'A' then 'B', where A & B are concepts.

Type.8. Problem - Solving: *It* involves developing the ability to invent a complex rule, algorithm or procedure for the purpose of solving one particular problem.

Relevance and Educational Implications:

1) While teaching, follow the principle of teaching from simple to complex, and known to unknown.

2) Organize knowledge according to a hierarchy of subcomponent skills and learned rules.

3) Learners should be trained to:

➢ what it was to look for,

➢ what it was to be done,

➢ what classes of situations were likely to be encountered.

4) Each of the different types of learning requires different instructional conditions.

5) Each level of learning requires instruction that is customized to meet the needs of the

pupil.