

# Maxims of Teaching

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# Maxims of Teaching

- The role of the teacher is considered main in the classroom.
- S/he is responsible for creating such an ambience as gives rise to maximum learning activities and various experiences may be achieved.
- But, practically, it is not as convenient as it looks. However talented, scholarly and able a teacher may be, S/he would be considered unsuccessful if S/he is unable to transfer learning to students.
- Teaching is an art which encompasses the following:
  - Mastery over subject
  - Scientific knowledge of teaching style for transfer of knowledge to pupils.
- In order to achieve this objective, teacher's subject knowledge is not the only factor which is required.

# Maxims of Teaching...

- Teaching is considered a part of learning.
- The result of all teaching processes really worth the name is learning.
- Teaching is an external enterprise while learning is a mental activity.
- According to Bernard, *“In teaching-learning process, teachers and students encourage learning.”*
- In fact, teaching is a task and learning is an achievement.
- Learning objectives can be realized by properly organizing teaching skillfully, effectively and carefully.
- In addition to this, the teacher should know some maxims with the help of which the teacher may present the subject matter before the students effectively as well as efficiently.

# Maxims of Teaching...

- Educationists like the Herbert Spencer and Comenius engaged in actual classroom teaching.
- They have evolved certain simple notions and working ways which prove helpful in the task of teaching.
- These are known as maxims of teaching.
- Maxims of teaching have been discovered not invented.
- They are simply statements of the way in which teaching and learning go forward.
- They ensure effective and efficient teaching.
- The primary motive of use of maxims of teaching is the enhancement of quality of learning.
- Teaching maxims play an important role in making learning stable and permanent.

# Maxims of Teaching

- The meaning of maxims of teaching is very simple.
- Those general ideas and methods of doing the work which prove helpful in the task of teaching are termed as **maxims of teaching**.
- These maxims have been formulated by the psychologists, educationists, pedagogues and preceptors on the basis of their experiences.
- These maxims are reliable and are universally applicable.
- Different maxims of teaching are applied in different teaching situations on the basis of well-planned strategy and logic.
- Maxims of teaching act as the foundation which catalyzes the momentum of teaching-learning process and thus helps the teacher in achieving the pre-determined objectives of education besides providing contentment to both the learners as well as the teacher.

# Maxims of Teaching...

1. From to known to unknown
2. From simple to complex
3. From concrete to abstract
4. From particular to general
5. From whole to part (From Analysis to Synthesis)
6. From Psychological to Logical

# From Known to Unknown

- This maxim states that the new knowledge to be given to pupils must be logically linked with their previous knowledge.
- This maxim facilitates learning process and economizes the efforts of the teacher and the taught.
- This maxim is an indispensable part of teaching-learning process.
- This is a natural method of learning.
- In practical life situations too, we follow this maxim in that we interpret new things we perceive on the basis of similar things perceived earlier by us.

# From to known to unknown...

- A good teacher should always plan his teaching on the principle of proceeding from known to known.
- Teacher should first activate pupil's previous knowledge and present new knowledge on the basis of that activated previous knowledge of pupil.
- In other words, whatever the pupils know, the new knowledge of the unknown should be given on that basis.
- This roughly corresponds to *Analogy* and is also the heart and soul of *Analytical method of teaching*.
- This maxim is the part and parcel of *set induction skill* (lesson introduction skill).
- It can also be employed in instillation of *moral values* in prospective teachers.



## Example:

Law of indices  $a^m \times a^n = a^{m+n}$

## Solution:

We have to start with  $a^2 \times a^3$

$$= (a \times a) \times (a \times a \times a)$$

$$= a^5$$

$$= a^{2+3}$$

$$a^3 \times a^4$$

$$= (a \times a \times a) \times (a \times a \times a \times a)$$

$$= a^7$$

$$= a^{3+4}$$

Therefore,

$$a^m \times a^n$$

$$= (a \times a \times \dots \times a \text{ m times}) \times (a \times a \times \dots \times a \text{ n times})$$

$$a^m \times a^n$$

$$= a^{m+n}$$

Student will measure the angles of the triangles drawn and write these in a tabular form

Figure no.	Measure of different angles			Total
	Angle A	Angle B	Angle C	Angle A +B+C
1	90	60	30	180
2	120	30	30	180
3	60	60	60	180

**Calculation:** after measuring the angles of different triangles in the form of cardboard sheet. We calculate and conclude their sum.

In this way by calculating the three angles of a triangle the students will be able to conclude with inductive reasoning that the sum of three angles of a triangle is 180 degree or two right angles.

# From simple to complex

- This maxim states that difficulty should follow ease in teaching.
- Alternatively, the teacher should start with simple thing and proceed to difficult one in a logical, systematic and step wise manner.
- The skillful application of this maxim proves to be advantageous in teaching of all subjects.
- The maxim '*From Simple to Complex*' in association with another maxim '*From Psychological to Logical*' .
- Teacher should start his teaching with the simpler things and the complex contents should be taught afterwards.
- This creates interest in the pupil and motivates him to aspire more.
- The teacher should decide what is easy and what is difficult keeping in view the interest, attitude, ability, potentiality and needs of the pupils.

# From simple to complex...

- After that the teacher should divide the subject matter in such a way that simple aspects should come first and these should be followed by the complex one in an order.
- If teachers start with complicated problem, it is possible that 70-80% of students may not be able to understand and answer it.
- Therefore they will lose their heart, confidence and interest in study. Teacher has to be careful in deciding about simpler part too.
- What is simple in teacher's view is not necessarily simple for students.
- It can be vice-versa too.
- Thus, keeping in view students ability, attitude, potentiality and interest, simple tasks should be fixed. This maxim should also be coupled with another maxims viz. '*From Whole to Part*', '*From Analysis to Synthesis*' and other maxims as per the felt need.

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$$= (a \times a \times \dots \times a \text{ } m \text{ times}) \times (a \times a \times \dots \times a \text{ } n \text{ times})$$

$$a^m \times a^n$$

$$= a^{m+n}$$

# From concrete to abstract

- Abstract and concrete are classifications that denote whether a term describes an object with a physical referent or one with no physical referents.
- An abstract object is an object which does not exist at any particular time or place, but rather exists as a type of thing, i.e., an idea, or abstraction. In general, tangible entities are grouped under concrete objects while intangible entities are grouped under abstract objects.
- Mental development of pupils begins with the concrete and afterwards S/he gains micro-words for them.
- Therefore a good teaching should lead from concrete to abstract.

# From concrete to abstract...

- The concrete material is to be shown and the pupils should be opportunities for acquiring direct experience in order to make them able to learn the abstract concepts at the later stage.
- This maxim, however, sometimes can't be employed in certain situations.
- For example, such concepts as personality, intelligence, learning, knowledge, attitude, thinking, etc. are abstract in that these can't be touched or seen directly i.e. these are intangible.
- (For example, we cannot show or display the intelligence of an individual in a concrete form before the students as intelligence is an abstract concept).

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# From particular to general

- Generalized facts, principles, concepts and phenomenon are quite abstract in nature and therefore should not be presented in the beginning of the teaching.
- Specific examples should be presented before the pupils first and then the general laws or principles should be derived from those specific examples.
- **Example 1:** Square of an odd number is odd and square of an even number is even.

- ***Particular concept:***

$$1^2 = 1$$

$$3^2 = 9$$

$$5^2 = 25$$

Equation 1

$$2^2 = 4$$

$$4^2 = 16$$

$$6^2 = 36$$

Equation 2

- ***General concept:***

From equation 1 and 2, we get

- Square of an odd number is odd
- Square of an even number is even.

# From particular to general....

- **Example 2 :**
- Sum of two odd numbers is even
- ***Particular concept:***
- $1+1=2$
- $1+3=4$
- $1+5=6$
- $3+5=8$
- ***General concept:*** In the above we conclude that sum of two odd numbers is even

# From whole to part

- This maxim states that the difficult or complex topic or subject matter be logically and systematically broken into different components.
- This maxim is also known as 'from Analysis to Synthesis '.
- Analysis means breaking something into individual elements.
- Synthesis is just reverse of Analysis. It means joining the individual elements into one whole.
- In other words, in analysis, the subject is broken into its components or elements while in synthesis, the scattered elements of the subject are collected and the clarification of these elements is logically presented.
- In fact, these two are an integral part of Cognitive domain of Bloom's taxonomy of Educational objectives.

# From whole to part...

- According to Gestalt Psychology, we first perceive the object as a whole and then its parts.
- Whole is not only greater than the parts but also more understandable, motivating and effective.
- For example – when we see some trees our attention goes on the entire tree, then on its stem, branches and leaves etc.
- Therefore, beginning should always be made with the whole and then step by step its various parts should be presented before the students.
- The complex topics or subjects need to be taught in a logical and systematic manner with the help of this maxim.
- *(Formulation of objectives, hypothesis or hypotheses on the basis of the rough and systematic analysis of research problem in question.)*
- This maxim is quint essential of science and mathematics. It can, however, be made use of in other subjects too viz. economics, commerce, geography, political science, etc.

# From Psychological to Logical

- As regards the realm of Educational Psychology, the focus is the child or the learner.
- The entire teaching-learning process is planned and organized on the basis of interests, abilities, capacities, etc. of the learner.
- This maxim states that the sequence of teaching process should be psychological followed by logical.
- If the teaching process is not in logical order and its organization is not systematic, the entire teaching process will become either hotchpotch or haphazard.
- Consequently, the teaching process will either become an exercise in futility or end up in fiasco.