Teacher and Teaching: Some Issues in the context of 21st Century

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Abstract : The role of teachers for social reconstruction cannot be undermined. The teachers since time immemorial play a vital role for individual upliftment as well as that of the society. With the passage of time the role of the teachers and his teaching styles and focus points get changed in view of multifarious challenges and issues of the changing time. The teachers are expected to aware of all such issues and try to cope with them with a changed approach in terms of his role in the society and his teaching. The present article deals with all such aspects from the conceptual view point.

Keywords: Guru, Instruction, Indoctrination Training, Levels of Teaching

Introduction

The teacher and his teaching have been considered a matter of great concern since time memorial. The history of India speaks that the roots are embedded deep in the Vedic and Upanishadic traditions in which the status of teacher was considered more than the God. Taking the reference of Rig Vedic Age, it is clearly understood that the 'Rishis' popularly known as 'Vipra' used to be accepted supreme teachers and they enjoy great honour and respect in the society. The Vedic period indicates that the process of education used to be in the form of discussion between the teacher (Guru) and students (Disciples) for the diffusion and promotion of knowledge. The students (Disciples) considered that teacher as an ideal model for all times. The teacher (Guru) was not only considered the source of knowledge, but, the source of spiritual values also. A little change was noticed during the Buddhist period (500 B.C to 1200 A.D) and in medieval period an emphasis was put on the teaching and learning of 'Koran' as the text. The Maulvi of the mosque used to be the teacher of the Moktab (school). At the Madrassah level a scholarly person worked as teacher who was responsible to impart the knowledge at higher (college) level. During the Buddhist period or medieval period the teachers did possess high status in the society. During those days the teachers used to emphasis on calligraphy, clear and correct pronunciation, ability to read, write, recite, memorize, etc. The teaching was not taken systematically and it was not considered as a profession. But, the western thinkers and their thoughts paid adequate attention on

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teachers and their role dates back to the days of Plato who came out with the foundations of education and the philosophy of teacher education. More focus was put on teacher and making his teaching more effective. Teaching is an important concept and several efforts have been made to define it, but, the proper definition has not yet come in shape. The term 'teaching' has been understood in many ways such as:

**Teaching from Descriptive Point of View**

The descriptive definition of teaching in 16th century was different than the definition which we have today. A descriptive definition of teaching is put as under:

- Teaching is “imparting” of knowledge or skills.
- Teaching is transmission of knowledge.
- Teaching is radiation of knowledge.
- Teaching is sharing of experiences.
- Teaching is dissemination of information.
- Teaching is interactive process.

This descriptive meaning of the term "teaching" creates confusion and different persons interpret differently such as imparting knowledge and skill may be taken as sharing experiences. In other context, it may be considered as the communicatin of information as stated above. Further it is also perceived as if it is the bipolar interaction between teacher and taught. In view of this, the descriptive meaning of teaching may focus upon a particular course of development (Scheffler, 1960). But, there is a group of who advocate teaching as an inquiry and it goes against the concept.

**Teaching as Success**

When "teaching" is associated with success, it indicates the perception of learning in built mechanism under the process of teaching. It means that teaching entails learning and learning is implied in teaching. Therefore, the hyphenated expression is used as "Teaching-Learning" and popularly termed as "Teaching-Learning" process. In this context, teaching is defined as an activity of the teacher which produces or induces learning. John Dewey (1934) put that teaching is to learning as selling is to buying. It refers that if no one is to buy then there is no selling and similarly there is no teaching if someone does not learn. Here, in the process of teaching, learning becomes mandatory and teaching is not merely an interaction between teacher and taught. This notion of teaching has been objected by Ryle (1950) and said 'teaching' is risk verb like 'racing', 'treating', 'traveling' and search'. Now as teaching is to learning similarly racing is to winning, treating is to curing, traveling is to arriving, and searching is to finding. But, it is not possible all the times, and the pragmatic aspect of the success concept is that teaching intends to generate learning and if it does not do so then the reasons need to be found out like other professions.

**Teaching as intentional activity**

Here the focus is on the intention of a teacher which works to create or generate learning. It means teaching is intended behaviour for which the aim is to induce learning (Scheffler, 1960). The performance of teachers is considered as guided by their intentions, grounded in the teacher's belief system and modes of thinking (Fenstermacher, 1980). It involves the thinking process of teacher which makes him / her to work and produces some desired results. It is a matter of belief of the teacher and the primary sources of belief is work place and programme preparation. Finally it is concluded that successful teaching can not be associated with some set rules or pattern of behaviour.
Teaching as normative behaviour

In view of the normative behaviour, teaching is a generic term, it comprised of various activities such as training, instruction, indoctrination, conditioning etc. (Green, 1968).

It is that instruction and indoctrination have been put in higher order of teaching which deal with the imparting of knowledge and shaping of belief respectively. The training and conditioning have been put in lower order of teaching which help in shaping conduct and behaviour respectively. An individual may be trained to perform some activities or actions skillfully. Conditioning is the lowest level of learning on the part of an individual or animal and seldom cross the stage of training. Instruction and indoctrination both have been placed in higher order of teaching, but, these may also to be equated with teaching. Similarly a large number of attempts have been made by Komisar (1966), Gage (1968), Clarke (1970), Brown (1975), Jangira & Singh (1982), to conceptualize 'teaching' and from the analysis of teaching it is inferred that teaching is a set of actions or activities performed by the teacher in classroom which intend to induce or produce some learning among the students. The term 'learning' refers to the desired behavioural change among the students in terms of their cognitive, affective and psychomotor behaviours. Further, William H. Burton (1958) has made an attempt to investigate the relationship between teaching and learning. There are certain situations which indicate that relationship between teaching and learning and those are put as under:

- Teaching is considered effective when substantial amount of learning takes place.
- Teaching is always based on objectives and these objectives are to be seen in the behaviour of students in terms of their learning, therefore, the teaching objectives may also be called as learning objectives on the part of the students.
- Adequate facilities for teaching do have some bearing on the creation of learning among the students.
- The affective characteristics like-values, interest, attitude etc. have positive effect on the learning of students (Getzels and Jackson, 1963).
- Supporting teaching devices indicate positive effect on the learning of students.
- Appropriate selection of teaching strategies has good and positive effect on the learning of students.

Structure of Teaching

It is well known that teaching is a multifarious activity which involves varieties of components. N.L. Gage (1978) says, "there is relationship between the variables in teaching and learning" and it establishes a quite strong scientific basis of teaching. The structure of teaching is definitely scientific in nature and it possesses some variables, functions, levels, operational phases etc. All these aspects of teaching are described as under:

(i) Teaching Variables

It is important to understand that the teacher moves to classroom and performs various activities with the intention to induce some learning among the students. Thomas F. Green (1971) has classified all these activities into three categories such as the logical activities of teaching, the strategic activities of teaching, and the instructional activities of teaching. The logical activities of a teacher refer to the activities relating to the process of thinking or reasoning about the event of teaching and it follows the acts of defining, giving evidences, demonstrating, giving reasons, illustrating, inferring, comparing, and synthesizing or concluding. Green (1971) stated the instructional activities pertaining to the way
teacher’s work is organized by an institution or school and therefore, these activities may also be called as institutional activities, like attending meetings, keeping records, taking attendance, consulting parents etc. In view of all these activities, the teaching process works with three categories of variables and those are stated as under:

- Independent variable
- Dependent variable
- Intervening variables

In the process of teaching, the teacher plays a significant role in planning, organizing, leading and controlling the whole gamut of teaching in the classroom. The teacher is independent and having freedom to select the required instructional material, strategy of presentation, teaching devices, classroom arrangements etc. The performance of students is directly influenced by the various activities and efforts of the teacher. The students act as dependent variable and a significant variable of teaching process. In the absence of dependent variable (students), the independent variable (Teacher) becomes meaningless in the process. The third, variables are known as the intervening variable which refer to the content, approaches of teaching, devices of teaching etc. which influence the teaching process and have direct some bearing on the performance of students directly or indirectly.

(ii) Functions of Teaching

Before discussing the various functions of teaching process it is essential to understand that these functions are performed by the independent and dependent variables. All the functions of teaching variables have been put into three categories such as diagnostic, prescriptive, and evaluative functions. First, the teacher needs to perform the diagnostic function in which the teacher investigates the entering behaviour of students (dependent variable) and intends to find out the problems of their learning of the course content. Teacher analyses the various problems of teaching and learning. Here, the teacher needs to be more active and careful in his prescription which suits to the students for their cognitive, affective, and psychomotor abilities. Along with teacher, the students are also need to play some role so that the objectives of teaching and learning get realized properly. Now the prescriptive function leads to the evaluative function of teaching. The evaluative function aims at the examining of the prescription. How did the prescription work? What is the progress of students in terms of their learning? How many teaching / learning objectives have been realized and how many are yet to realize. The teacher needs to construct the criterion test which is to be used as the tool of evaluation and students are to attempt it actively to show their performance. In view of these functions, it is perceived that teaching has its scientific basis by involving diagnostic, prescriptive, and evaluative functions. Each teacher needs to perform these functions to make his / her teaching effective and scientific in nature.

The relationship of teaching variables and functions has been diagrammatically shown in figure- 1.

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**Figure – 2: Structure of Teaching**

![Diagram of Teaching Structure](image)
(iii) Levels of Teaching

From the above discussion it is perceived that teaching is objective based process and it influences learning. There is certainly some relationship in formal teaching in the classroom and learning of some group of students sitting in the particular classroom. Therefore, an hyphenated expression, i.e., “Teaching-Learning” has become common to all sections of scholars. The learning objectives and learning conditions fall on a continuum which ranges from thoughtless to thoughtful system of teaching. In other words, it may also be put as achieving the cognitive objectives from 'knowledge' to 'evaluation' as suggested by B.S. Bloom (1956)are described as under:

1. Knowledge
   a) Knowledge of specifies
      i) Knowledge of Terminologies
      ii) Knowledge of specific facts
   b) Knowledge of Ways and Means of dealing with specifics:
      i) Knowledge of conventions
      ii) Knowledge of Trends and sequences
   iii) Knowledge of classifications and categories
   iv) Knowledge of criteria
   v) Knowledge of Methodology
   c) Knowledge of Universals
      i) Knowledge of Principles and generalizations
      ii) Knowledge of theories and structures

2. Understanding

After obtaining the above stated knowledge, it needs to be understood / comprehended through the following activities:
   i) Translation, (ii) Extrapolation, (iii) Interpolation (iv) Interpretation, (v) Illustration.

3. Application

It refers to the use of knowledge and solving the problem.

4. Analysis

It refers to understand the knowledge at higher level. For this, the various elements of knowledge (concept) are to be separated:
   i) Analysis of elements, (ii) Analysis of relationships (iii) Analysis of organizational principles

5. Synthesis

It means putting the elements together:
   i) Assembling of elements,
   ii) Production of unique communication
   iii) Production of Plan
   iv) Derivation of abstract relationship
6. Evaluation

It refers to give the judgement on the basis of Intrinsic and Extrinsic values of the object. This taxonomy of cognitive objectives is considered the basis of whole teaching-learning process. It makes the teacher to cover three important levels of teaching-learning process and those are put as under:

- Memory level
- Understanding level
- Reflective level.

Memory level of teaching is considered the lowest level of teaching and learning as the emphasis is put on the memorization of terminologies, facts, figures, classifications, criteria, methods, laws, principles, theories etc. without understanding the real meaning of these segments of the course content. But, the teaching and learning begins from this level and the teacher is not to terminate his/her teaching only at this level. In case any of the teacher does so, it means the teaching is incomplete and it is injustice to the students. In view of Bloom's taxonomy of cognitive objectives, the imparting of knowledge falls under the memory level of teaching. The second higher level of teaching is understanding level and the teacher emphasizes on the creation of understanding or comprehension among the students about the knowledge by way of making use of the activities like translation, establishing the interrelationship, interpolating, extrapolating, and giving the interpretations. Again the second category of cognitive objectives given by B.S. Bloom (1956) is associated with understanding level of teaching and learning. The teaching at understanding level is certainly a thoughtful teaching and students are able to put the concepts in their own words, explain, interrelate, interpolate and interpret the obtained information meaningfully. The third level of teaching and learning is the highest and most thoughtful level which we call reflective level. It is the level of teaching and learning in which the teacher creates all skills among the students and they are able to use the knowledge in performing some actions or solving the problems. Of course before this level of teaching and learning it is essential that memory and understanding levels need to be ensured. The main objectives of the reflective level of teaching and learning are to develop the ability for problem solving, critical creative and original thinking among the students. Taking into account the taxonomy of cognitive objectives suggested by B.S. Bloom (1956), the four categories of cognitive objectives like application, analysis, synthesis, and evaluation fall under the reflective level of teaching and learning on the part of teacher and students respectively. From this discussion it is concluded that all these three levels of teaching and learning like memory, understanding, and reflective levels are conveniently covered by adopting Bloom's taxonomy of cognitive objectives. The taxonomy works as the basis of an effective and productive teaching-learning process which makes the teachers to cover memory, understanding, and reflective levels, of teaching and learning.

Phases of Teaching

Teaching is serious and scientific activity to be performed by any of the teacher. To be effective, productive, and successful it is essential that the teacher needs to plan and execute it in a logical order for ensuring the quality of education. For this purpose, the teaching process needs to be put in three stages or phases and those three phases of teaching process are like-pre-Active Phase, Interactive phase, and Post-Active Phase. All these phases of teaching have been shown in figure 2:
Teaching

Pre-Active Phase
1. Selection of subject
2. Selection of unit
3. Writing General objectives
4. Writing Specific objectives
5. Collection of subject Matter
6. Collection of Teaching Aids
7. Classroom setting
8. Selection of Approach of Teaching
9. Selection of Evaluation Tools

Interactive Phase
1. Perception of classroom climate
2. P.K. Testing
3. Creating Motivation
4. Declaration of Topic
5. Teacher’s Activities
6. Student’s Activity
7. Objective wise presentation & Evaluation
8. Feedback & Reinforcement.

Post-Active Phase
i) Recapitulation
ii) Home work

Figure – 2: Showing three phases of teaching process.

The figure-2 demonstrates that the first phase of teaching is called as pre-active phase as it is the time during which the teacher makes a plan for his / her teaching in the classroom. The teacher prepares himself / herself before going to the classroom for teaching. During this time, the teacher selects unit / lesson of the subject. As per the nature of the unit, the teacher decides about the general and specific objectives which he / she needs to cover in the classroom. These specific objectives are written in behavioural form in tune with the taxonomy of educational objectives suggested by B.S. Bloom (1956). The pre-active phase of teaching may also be called as preparatory phase. The effectiveness of teaching depends upon the planning and preparation of the teacher during this phase of teaching. The second phase of teaching process is the phase which is related to the interaction in classroom between the teachers and taught. After entering the classroom, the teacher starts his activities as planned in the pre-active phase and interacts with students. Therefore, this period of interaction is called as Interactive Phase of teaching process. Similarly the students may also follow some activities such as putting questions for their clarification, drawing work, noting down etc. After this interaction and completing the first objective and its subject matter, the teacher intends to evaluate by putting the question relating to the objectives and its content. The sole purpose of this evaluation is to ensure the learning or realization of the first objective of the teaching. The same process continues till the realization all the pre-decided specific objectives of the teaching process. Further, the post-active phase covers the homework or home assignment for the students pertaining to the topic covered under the interactive phase. The teacher needs to care while giving the home work that it is not to become a punishment or burden to them rather it is to enhance their learning and becomes a source of motivation. Next, the teacher gives the reference of pages of text book from which the subject has been taught and some additional reading materials / books which fall under the preview / level of students. In this way the teaching process covers three phases and each phase is interlinked with each other for making the teaching process effective and successful.
(v) Paradigm Shifts in Teaching Process

In the context of nature, variables, function, educational objectives, levels, phases etc, the teaching process needs to be understood. An analysis of the old process of teaching reveals that the system is absolutely teacher centric in nature. The teacher is found active in the classroom and the students are passive in nature. But, it has been realized that the system needs to be changed from teacher centric to learner centric in which the learner is put on work and the learner is found active in participation of learning activities. Individualized instructions make the learner to learn the required content at his own pace. Third the teaching process is confirmed to the four walls of the classroom which is to be shifted from four walls of the classroom to the learning in the wider social context. Fourth, the general teaching is to have paradigm shift in terms of making it very specific and objective based in nature. Fifth, the teaching process continues unit after unit and there is hardly any scope of feedback and reinforcement, therefore, the change needs to be made by giving the provision of formative evaluation unit after unit so that the required feedback and reinforcement are given to students and complete learning of the unit is ensured judiciously. Sixth, it is observed that the focus lies on imparting knowledge and the students memorize it. But, it is to be shifted from knowledge level to the understanding and reflective levels. Eighth, in the present situation, the teacher intends to give the huge stock of knowledge to the students, but, in place of giving the knowledge in rigid and fixed manner, there is need to put the students in such a learning experience through which they are to create or evolve or construct the knowledge. This process will involve the students in critical thinking, creative, imaginative, and analytical processes.

In the light of the changing scenario of the society in 21st century, the International Commission and Education (ICE-1998) needs to be quoted. Given the present and foreseeable advances in Science and Technology, and the growing importance of knowledge and other intangibles in the production of goods and services, we need to rethink the place of work and its changing status in the tomorrow's society' knowledge has been considered as the key driving force in the 21st century and there is need to build excellence in the educational system to meet the challenges. National Knowledge Commission-2006-09 (NKC -2006-09) recommended for revamping the school education and accordingly preparing the teachers. Now it is hoped that the paradigm shifts in teaching process will definitely ensure the desired quality of education as recommended by NKC- 006-09.

Taking the stock of all the descriptions pertaining to teaching, it is considered that teaching is a serious and scientific activity. Teaching is being considered a profession as per the review of recent literature on teaching profession (Hoyle, 1981). Some of the common components of the profession have been stated (Lieberman, 1956) and those are put as under:

- Profession is a unique, definite, and essential social service.
- Profession gives emphasis on intellectual techniques in performing this service.
- Profession needs a long duration of specialized training.
- Profession has a broad range of autonomy on the part of the practitioner.
- The practitioner accepts the broad responsibilities for judgement made and acts performed.
- The emphasis lies on the service rendered rather than the economic gain to practitioner.
- It is comprehensive and Self-Governing in nature.
Keeping in view the above stated features of a profession, the teaching fits in to the framework of a profession and a teacher comes as a practitioner who is concerned with professional practice, ideologies etc. Finally, teaching may be put as a profession and teacher as a practitioner in the 21st century for meeting up all kinds of educational challenges.

References