

# ROLE OF TEACHERS IN CONSTRUCTIVISTIC APPROACH

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## ABSTRACT

*This paper attempts to explain learner centered methodology of teaching at the school level due to implementation of National curriculum frame work for school (2005), since NCF 2005 emphasizes the process of constructing knowledge i.e. learning to learn, willing to unlearn, and relearn as a new paradigm of learning in a flexible and creative manner. This Learner centered interactive pedagogic approach insists certain psychological principles as a representation of current knowledge base of learners and learning. This approach is based on Constructivist learning approach which socializes the people into the culture of self- reliance, resourcefulness, peace oriented values and health and also facilitates learner in acquisition of key knowledge, attitude and behavior to face the society at large. Considering above the teachers' role becomes more complex, difficult and pivotal in the context of new curriculum and has to transform the teacher as a facilitator, co-learner, democratic leader and diagnostician.*

*Keywords: Constructivism, Learner Centered, Interactive Pedagogy.*

## INTRODUCTION

Educational system of any nation is a mirror which reflects the image of the nation being shaped. The beginning of this century has seen revolutionary changes in the field of education. Education has been undergoing a revolution from teacher-centered to learner-centered system and this demands changes in the instructional process and materials for making the process more effective. Learning occurs through the interaction between the teacher and the learner mediated by the curricular practices. The nature and form of such interaction varies with the type and level of curricular practices. Curriculum attempts at the development of cognitive and non-cognitive areas of learning with emphasis on key qualities of personal and social growth. Curriculum leads to an education that would reduce inequalities and respond to social cultural and economic context of the learners, and promote excellence. Otherwise it should lead to relevance, equity and excellence. There is a strong connection between curricular activities mediated by cultural tools and the learner's intellectual activities. Delor perceives that curriculum should reflect the four pillars of learning i.e. learning to know, learning to do, learning to be and learning to live together.

## Constructivistic approach - National Curriculum Framework for School Education (2005)

The existing educational system is dominated by 'teacher talk', lessons that are predominately text book oriented, the devaluing of student thinking and over emphasis of curriculum mastery. The curriculum developers have made continuous and consistent efforts to change and modernize our system of education with a view to making it respond to the challenges of a changing society. The School curriculum has been revised many times. We have already resorted to the learner-centered interactive pedagogy in the primary and secondary school levels and at the higher secondary level. It is at the implementation stage. The National curriculum Framework (2005) demands a change in the role of the teacher. However, the successful implementation of this learner-centered interactive pedagogic approach faces setbacks due to intrinsic and extrinsic factors. Hence identification of these factors and finding out amicable solutions is the need of the hour.

The new curriculum has constructivism as its major theoretical backing. It has two aspects; cognitive constructivism and social constructivism that initiate learner-centered approach in education. The basic idea

of constructivism is that the learner must construct knowledge; the teacher cannot supply it (Bringuier, 1980). Learning is viewed as an interaction between the learner and the learning environment. During this interaction, prior knowledge is used as a basis to interpret and construct new understanding. The constructivist paradigm as advocated by Piaget (1960/1981) and Bruner (1990), stressed that whatever gets into the mind has to be constructed by the individual through knowledge discovery. Its emphasis is on how a student constructs knowledge. In other words, this theory holds the view that learning is an active process in which learners construct new ideas or concepts based upon their current and past knowledge. Constructivism is an approach where the learner is building an internal illustration of knowledge, a personal interpretation of experience. Constructivism emphasizes the careful study of the processes by which children create their ideas.

Learner-centered is based on an understanding of the following Learner-Centered Psychological Principles as a representation of the current knowledge base on learners and learning (APA, 1997).

### **Learner-centered Psychological Principles**

The principles apply to all learners, in and outside school, young and old. Learner-centered is also related to the beliefs, characteristics, dispositions, and practices of teachers-practices primarily created by the teacher.

### **Cognitive and Meta cognitive Factors**

#### ***Principle 1***

Nature of the learning process. The learning of complex subject matter is most effective when it is an intentional process of constructing meaning from information and experience.

#### ***Principle 2***

Goals of the learning process. The successful learner, over time and with support and instructional guidance, can create meaningful, coherent representation of knowledge.

#### ***Principle 3***

Construction of knowledge. The successful learner can link new information with existing knowledge in meaningful ways.

#### ***Principle 4***

Strategic thinking. The successful learner can create and use a repertoire of thinking and reasoning strategies to achieve complex learning goals.

#### ***Principle 5***

Thinking about thinking. Higher order strategies for selecting and monitoring mental operations facilitate creative and critical thinking.

#### ***Principle 6***

Context of learning. Learning is influenced by environmental factors, including culture, technology, and instructional practices.

### **Motivational and Affective Factors**

#### ***Principle 7***

Motivational and emotional influences on learning. What and how much is influenced by the learner's motivation. Motivation to learn, in turn, is influenced by the individual's emotional states, beliefs, interests and goals, and habits of thinking.

#### ***Principle 8***

Intrinsic motivation to learn. The learner's creativity, higher order thinking, and natural curiosity all contribute to motivation to learn. Intrinsic motivation is stimulated by tasks of optimal novelty and difficulty, relevant to personal interests, and providing for personal choice and control.

#### ***Principle 9***

Effects of motivation on effort. Acquisition of complex knowledge and skills requires extended learner effort and guided practice. Without learners' motivation to learn, the willingness to exert this effort is unlikely without coercion.

### **Developmental and Social Factors**

#### ***Principle 10***

Development influence on learning. As individuals develop, they encounter different opportunities and experience different constraints for learning. Learning is most effective when differential development within and across physical, intellectual, emotional, and social domains is taken into account.

#### ***Principle 11***

Social influences on learning. Learning is influenced by

social interactions, interpersonal relations, and communication with others.

## Individual Differences Factors

### *Principle 12*

Individual differences in learning. Learners have different strategies, approaches, and capabilities for learning that are a function of prior experience and heredity.

### *Principle 13*

Learning and diversity. Learning is most effective when differences in learners' linguistic, cultural, and social backgrounds are taken into account.

### *Principle 14*

Standards and assessment. Setting appropriately high and challenging standards and assessing the learner and learning progress-including diagnostic, process, and outcome assessment-are integral parts of the learning process.

## Role of Teacher in Constructivistic Approach

In the above context, the educational institutions and teachers has major role to play in ensuring pupils are socialized into a culture of self reliance, resourcefulness, peace oriented values and health. Teachers are one of the main pillars of a sound and progressive society. They bear the weight and responsibility of teaching and, apart from parents, are the main sources of knowledge and values. The question of what knowledge, attitudes, behaviors and skills that teachers should possess is the subject of much debate in many centuries. This is understandable, as teachers are entrusted with the transmission to learners, society's beliefs, attitudes and deontology, as well as of information, advice and wisdom, and with facilitating learner's acquisition of the key knowledge, attitudes and behaviors that will need to be active in society and the economy. Therefore there is a need to create teacher who can respond to needs of the pupils and their learning i.e.

- Care, and love to be with them.
- Understanding them with in social cultural and political context.
- Be receptive, and constantly learning.
- View learning as a search for meaning out of personal

experience and knowledge generation as continuously evolving process of effective learning.

- View knowledge not as an external reality embedded in text books but as constructed in the shared context of teaching, learning and personal experience.
- Own responsibility towards society and work to build a better world.

Thus, National framework for school curriculum (2005) insists that the focus should be learner centered who should actively engaged in constructing rather than only receiving knowledge through their individual and collective endeavors. Such a curricular vision needs to be supported and sustained with the systemic reforms of structure of institutions and nature of practices that support the children's inclusion in school and their learning. Further it stresses that education should aim to build the commitment to the values of equality, justice, freedom, concern for other's well being, secularism, respect for human dignity and rights, which should based on reasoning and understanding. The curriculum therefore should provide adequate experience space for dialogue and discourse in schools to build such a commitment in children. The curriculum also needs to emphasis the processes of constructing knowledge viz. learning to learn and willingness to unlearn and relearn are important means of responding to new situation in a flexible and creative manner.

The teacher role becomes more complex, difficult and pivotal in the context of the new curriculum. They have to get prepared for this new responsibility by creating new insight, outlook and competencies. Traditionally, learning has been thought to be a mimic activity, a process that involves students repeating or miming newly presented information (Jackson 1986). Constructivist teaching practices, on the other hand, helps learners to internalize and reshape or transform new information. Teachers have to play a catalytic role, entirely different from what he or she is used to, at the moment. A teacher will have to plan learning opportunities more meaningfully and imaginatively, in which student is encouraged to learn individually, in small groups, from one another and from society and the environment at large. Preparing different

ways of representing content is perhaps the most difficult part in planning the task, faced by a teacher.

Teachers should also create an environment that requires the students to state their point of view, and minimize the evaluation of student's ideas initially. Participation of students to construct knowledge is to be maximized. Students are to be encouraged to discuss and debate, the pros and cons of the different explanation, hypotheses and points of view. One way communication has to be replaced by two or multiple way communication. The teacher should investigate common misconceptions among the students, and form the basis of future teaching, so that learning becomes more meaningful. Methods such as laboratory work, field trips, discussions, seminars, role play, simulation and projects would involve the learners as active participants in the process of learning and make their learning more challenging, enjoyable and adventurous. Teachers have to plan strategies for challenging from experiences. The new curriculum opens new avenues for learning as well as challenges for the teacher trying to implement it. In a learner centered situation, the teacher becomes one of the many resources a student may learn from, not the primary source of information. Perhaps the best quality for constructivist teacher to have is the 'instantaneous and intuitive vision of the pupils mind as it gropes and fumbles to grasp a new idea' (Brooks & Brooks, 1993). Teaching involves the use of a wide body of knowledge about the subject being taught, and another set of knowledge about the most effective ways to teach that subject to different kinds of learner; it therefore requires teachers to undertake a complex set of tasks every minute, for which present teacher needs a formal training to undertake scientific way of teaching.

### Conclusion

There is a growing need among the teachers for establishing practical pedagogical approach that could facilitate transformation in the class room activity, i.e. teacher centered to learner centered approach. Further, Delor's concept of curriculum viz. Learning to know, Learning to do, Learning to be and Learning to live together, could be achieved only by constructivistic approach and also the objectives of NCF's, new paradigm of learning i.e.,

learning to learn, willing to unlearn and relearn could be realized. The constructivistic approach encourages a problem finding as well as problem solving for critical thinking, emphasizing the importance of teaching learning as a process of understanding of both socially and personally mediated learning, where the learner engages, monitors and assesses their own progress and performance and that of their peers, because the teacher becomes facilitator, supervisor and guide in teaching learning situations.

Constructivism is the major theoretical back up for the National curriculum framework (2005), since it initiates the 'learner-centered' approach in education. The new curriculum demands several changes in the existing system of education. The role of the teacher has to be modified to suit the new curriculum. As far as learner centered pedagogy is concerned, the teacher should encourage the students to attain or discover the concepts and also principles that are linkages of concepts, by themselves. In the context of new curriculum framework, Teacher should act as a facilitator, co-learner, democratic leader, and as a diagnostician.

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