



Constructivist Teaching - Need of the Hour

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ABSTRACT

Education by its very nature influences and gets influenced by the cross current and dynamic forces of the society and its social cultural and economic factors. The educational system must be responsive to change in order to realize both the individual and social objectives. In order to bring out the best of a person by promoting physical, intellectual, social and emotional development in the children, the need of the hour is to deviate from the age old traditional teaching techniques which does very little to make learning meaningful and effective. This article attempts to highlight how teaching learning process can be more effective and student centered which will help them to relate to real life situations. Constructivism is the most effective technique in which the learners construct their own knowledge. The Constructivist teaching involves student centered active learning experiences more pupil- pupil and pupil teacher interaction in solving realistic problems. The constructivist approach of teaching focuses in the qualitative aspect in school education. The constructivist approach philosophy has the primary aim of enabling each learner in facilitating them to think along with building a structure of knowledge that leads to the conversion of mission to creation of knowledge in society.

Keywords: Constructivism, Innovations, Inclusive education, Student centric

1. INTRODUCTION

The system of education especially the primary education, in India, has been undergoing changes from time to time. It has not been adequately realistic and related to life, needs and aspirations of the people. Periodic changes have been witnessed in the past but unfortunately they have either not been well planned or not properly implemented. The area that requires our attention and efforts the most is how to make the teaching learning process effective and more students centric? What are the innovative measures that can be introduced to make this process different from the traditional chalk and talk method of teaching? A critical look into the ways in which the inputs are actually transacted would unfold the prevailing reality. How the teachers are deviated from the conventional path during their curricular transactions which results in the outcomes not being as desired.

The National Curriculum framework [1] has laid down several important guiding principles related to the significant objectives of education and how they can be accomplished to bring about the desired learning outcomes .If these principles are implemented in true letter and spirit they will certainly bring about qualitative changes in our educational system especially at the primary level. The Behaviorist learning also focuses on overt behavior rather than what occurs in the mind. Here simple stimulus response approach Is practiced and the students are reinforced when they give correct responses, such teaching is teacher centered. Behaviourism has failed to explain the phenomenon such as language learning, problem solving and creative thinking. These methods prevalent since time immemorial do not augur well with modern psychology of childhood and knowledge available in the present times because this system does not have a holistic, comprehensive and inter sect oral approach .Actual teaching is not merely giving some information or knowledge but enabling the students to properly utilize the same independently and thoughtfully. It is helping students to acquire knowledge, skills, ideals, behavior and growth of a person with a balanced personality without which there is no learning but mere memorization Jean Piaget has promoted cognitive learning which focuses on what occurs within the child mind in the process of learning. It gives the whole teaching learning process a more holistic approach because this theory assumes that learners are active in their attempt to understand the world, new understanding and prior learning. Learning is a change in pupil's mental structures instead of changes in observable behavior.

The quality concerns of NCF 2005 [1] aims to give a broad a framework which will enable the teachers and schools to plan their own experiences which they visualize the learners should possess to achieve the educational objectives. The curriculum should be structured in such a manner that makes the required experiences feasible for constructivist pedagogy. With a view to reach this goal there are certain fundamental aspects that need to be focused upon.

What are the primary educational purposes that the schools need to achieve?

What educational experiences can be provided to the learner which will help in achieving them?

Ways and means to organize these educational experiences in a meaningful manner

Ways and means to evaluate whether these have actually been accomplished?

From behaviorism to constructivism is known as paradigm shift in education. The constructivist paradigm believes that learning occurs when students construct knowledge and they analyze their own experiences.

2. CONCEPT OF CONSTRUCTIVISM

Constructivist teaching involves student centered active learning experiences more pupil- pupil and pupil -teacher interaction in solving realistic problems. This constructivist approach brings about the qualitative aspect in school education. The philosophy of constructivist approach was to enable every learner to prepare and to build a structure of knowledge that in order to translate his vision of creating knowledge into reality [2] opined that Constructivism belongs to the school of thought that learning takes place in a an effective manner as the students are equally and more actively involved in the process of teaching and learning rather than being passive and mute spectators in the whole process.. In reality it is the students who are the creators and makers of the information or knowledge imparted to them. The teaching pedagogy based on the constructivist approach method are influenced by the researches of John Dewey and Jean Piaget who carried on researches in the field of child development and informal education. Dewey was of the view that the role of educator is important and the influential education. Should engage and enhance the experiential learning exploration and reflection associated with the role of educators. Piaget's view about constructivist teaching is that the learner learns by the experiences that he acquires in the right from his infancy to adulthood which is a prerequisite for learning. Constructivist learning emphasizes on the fact that knowledge is constructed with its base on his prior knowledge. He opines that the child's mind is not a blank slate hence the

knowledge or information given to him will not be left as it is without the child creating and constructing sense and knowledge out of it according to his own prior conceptions. Therefore, students learn most effectively when they are given the freedom to construct their individual understanding based on experiencing them and also reflecting on the experiences they acquire. One of the major goals for using constructivist teaching is that it gives the learner an opportunity to Learn by constructing their own knowledge and being trained to initiate for their own learning experiences [3]. Has described constructivism by means of four principles: Learning depends on our previous knowledge as we change our old ideas we adapt new ideas. Actual learning is done when ideas are invented rather than mechanically accumulating facts; when rethinking of old ideas take place new conclusions are arrived at [4] opines that learning occurs when construction of meaning takes place not by listening or receiving passively. He is of the view that the learner experiences disequilibrium when he faces a conflict in his own thinking and perception. This situation can be addressed by adapting and assimilating the new knowledge. We must accommodate and adjust our old knowledge and perceptions with the present knowledge so as to develop higher thinking level [5] Shares his view by stating that the way we perceive the world around is the way we look at it and the consequent constructs and patterns that we create. On the basis of our personal experiences we construct our understanding of things around us. When we experience something new, we try to fit it with our old perception.

The constructivist class room has proven effects of being able to impart quality teaching to the students by not putting burden on them but at the same time making them contribute significantly to the whole process. The students develop problem solving skills when they are exposed to multiple perspectives. It also inculcates in them thinking and reasoning skills and capability to draw their own conclusions because as they continue to integrate their new knowledge with the existing ones they are exposed to new avenues and solutions. During the whole process they are made capable to evaluate their decisions and conclusions. They also develop a reflective attitude wherein they understand the world in a more realistic manner. Constructivism develops in them insightful thinking which helps them to apply their experiences in alternative situations. It teaches the students to communicate their ideas and feelings with others in an effective manner.

Constructivist assessment engages the students initiative through creative instincts hence by constructing his own knowledge develops the capability to relate things to the outside world and has a more practical approach to what he has learnt. Constructivism also helps the student to develop confidence and provide intrinsic motivation to participate in the teaching learning process which is his morale booster and raises his self-esteem too.

So remarkable is the paradigm shift in teaching, it requires the traditional classroom environment to be adjusted to suit such a classroom process. The age old pattern of chalk and talk method has to be substituted with cooperative learning activity based learning and peer tutoring. The traditional school system does not have a holistic intersect oral approach; it is static not catering to individual needs of the students. [6] Believe in providing a class room which follows' the democratic philosophy and has a congenial environment is capable of providing meaningful learning for autonomous learner. The purpose is learning for developing, understanding and providing insight to the learner. A constructivist classroom is student -centric; such a classroom recognizes the unique experiences of the students. The structure of such a class contributes remarkably in the creation of a classroom environment which is conducive to constructivist learning. A classroom environment which has a democratic ethos reflects a shared responsibility and decision making between the teacher and the taught. Such a classroom gives significance to human experience and learning; accommodation to small units, individuals, and supports the active involvement of students in collaborative and creative activities such as the exchange of ideas and opinions, and responsibility for making key decisions on learning and for generating flexible rules; the instructor focuses on the learning of the students' more than his own role as an instructor.. Such a class is therefore self- monitored because a constructivist instructor fashions the classroom in such a manner that both the teacher and the taught jointly control the class room proceedings rather than overtly controlling the student. Hence the students are also directly accountable and responsible in the classroom proceedings and management that affect their being there as learners. [7] Had opined that Simultaneous change in power and control of classroom is required to for constructivist teaching to take place. Therefore environment in a classroom which has constructivist technique is inclusive, democratic, and interactive and student centered. The students are active here because

they have an instructor who operates not as mere imparter of knowledge but as a facilitator so there is a mutual respect for each other. The relationship of the teacher and the taught in a constructivist class is not only fruitful to the learner but to the instructor too.

3. ROLE OF A TEACHER IN THE CONSTRUCTIVIST CLASSROOM

The traditional teachers are trained to develop skills which do not make them becoming professionally sound. There is lack of potential and awareness in dealing with the dexterity of the students in the class in terms of learning needs of the students. The prevalent practice of imparting knowledge to the students rather than preparing and teaching the students before the child is cognitively ready and not pacing their learning and allowing the students to explore and understand the concepts and deepen their understanding in order to develop permanent learning. Since teacher is the kingpin in the whole educational process, the role of the teacher occupies a prominent place in the Constructivist model of teaching. Here the teacher initiates revolutionary modifications in the educational process so that the educational experiences that are provided to the child in school achieve the desired outcome and are also meaning fully organized. The teacher's job in such a classroom is observing teaching and evaluating students, in order to understand them and how they respond to learning. Since constructivism follows such a curriculum, learners are engrossed in their learning in order to reach new levels of cognition... Such a class focuses on the aim that the teacher has the skill to provide the child with such experiences that motivate them in exploring and excelling new knowledge. The instructor facilitates the whole process. He helps the students to construct knowledge and meaning from their individual experiences their previously acquired knowledge and perceptions and their interpersonal environments.

A constructivist teacher is a teacher who has the potential to be creative and flexible in incorporating those in the class. Undoubtedly constructivist teacher focuses on students learning rather than his/her own teaching [8]. Is of the opinion that how a teacher teaches should originate from how students learn. Constructivism is of the view that the knowledge attained by the students is not merely imparted by the teacher but is constructed and learnt by the students with the teacher merely being the importer and facilitator in the process of knowledge construction. Hence learners create their knowledge by an active mental process of development in which central role is played by the learner who is the creator of his own knowledge.

4. CONSTRUCTIVIST- A PROCESS APPROACH TO LEARNING

Constructivism, strategies adopts a Process Approach to learning [9] Explain it by saying that it is such a context within which learners can explore their new ideas and experiences. Hence the teacher's role in providing information decreases and is replaced by a more “strengthened role” capable in supporting students' own thinking and his meaning making abilities. Learners are trained to develop ideas in their own mind through supported activities; in which new skills are learned in supportive instructional contexts and they are also trained to initiate by taking risks and formulating hypotheses They are also encouraged to postpone being judgmental and evaluating their ideas [9] In such a process the students have a good opportunity to emphasize on their own ideas and to develop more reasoning and cognitive skills. A teacher devises his/her educational objectives as a mandatory activity and then requires thinking of a creative activity which would, facilitate the learner to achieve the objective of constructing new knowledge.

Activities for a Constructivist Classroom:

Experimentation and projects: Individual experiments are performed by the students and then they come together collaboratively to evaluate their results.

Research projects: Learners explore a topic and later present their findings to the Peer group and instructor.

Excursions: Learners present their ideas in the class in a real-world context. Discussions take place after these excursions or fieldtrips.

Films: provide visual cognition which brings greater clarity into the learning experience.

Class discussions: is among the most significant techniques of constructivism.

Campus wikis: provide the learners platform to create good learning resources.

As evident, a salient characteristic of constructivist technique class is the interactive nature that it is known for. It brings out the clear cut difference between anteater's lecture in a direct instruction classroom, and the purposeful talk by students in a student-centered constructivist classroom which has meaningful discussion transpiring in the class which results in quality learning [10] is of the view that constructivist activities in the classroom focuses on speaking and

listening and promote not only constructivist technique but also good rapport among the teachers and the students.

5. CONCLUSION

Constructivist teaching has become buzz word today. It is sometimes mistake by educators to be an approach of teaching and learning rather than being a philosophy on how knowledge is created or obtained. Nonetheless constructivism no doubt has a good effect on teaching learning process. It has made valuable contribution in the field of education in making teaching learning effective, student centric and useful because a constructive learning is a beautiful process [11]. are of the view that Constructivist teaching is "how one attains, develops, and uses cognitive process and also when students are comfortable, be it with a teacher or just a setting, they will learn much more quickly". Therefore, it is extremely important to create an environment that is safe and comfortable for the students to be able to learn in a way that relates to their lives in the present day.

REFERENCES

- [1]. National Curriculum in Framework (2005). Government of India.
- [2]. Canella and Reiff (1994). The Constructivist Programming, MN: Interaction Book Company.
- [3]. Twomey Fosnot, C. (1989). Enquiring teachers, enquiring learners: A constructivist approach for teaching, New York: Teachers College Press.
- [4]. Piaget, J. (1977). The development to thought: Equilibration of cognitive structures, (A. Rosin, Trans), New York: The Viking Press.
- [5]. Kelly, G.A. (1991). The psychology of personal constructs: Volume one - A theory of personality, London:Routledge.
- [6]. Grey, A. (2003). The road to knowledge is always under construction- A life History Teaching to Constructivist Teaching.
- [7]. Lester, N.B. & Onore, C.S. (1990). Learning Change: One school district meets language across the curriculum. Portsmouth, N H: Boynton/Cook Publishers.
- [8]. Lindfors, J. (1984). How children learn or how teachers teach'? A profound confusion Language Arts, 6 I (6), pp.600-606.

- [9]. Langer, J. and Applebee, A. N. (1987). How writing shapes thinking: A study of teaching and learning, National Council of Teachers of English.
- [10]. Belenky Y, M.F., Clinchy, B.M., Goldberger, N.R., and Tarule, J.M. (1986). Women's ways of knowing: The development of self, voice, and mind. New York: Basic Books.
- [11]. Airasian & Walsh (1997). Constructivist teaching, The Copplark Publishing Company.