

CONSTRUCTIVISM APPROACH FOR EFFECTIVE TEACHING AND LEARNING PROCESS

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Abstract

The present conceptual paper is emphasis on the Constructivism concept, importance and strategies of adopting constructivism in the teaching and learning process. Now a days our current education system emphasizes students centric Teaching-Learning process. Education is a continuous process basically focused on facilitating learning, acquisition of knowledge, various skills, values, beliefs, habits, and personal development to all.

The conventional teacher centric teaching learning process emphasizing on memorization is usually adopted across length and breadth of Indian schools. This paper sketches the need to redefine education to include more creative thinking by adopting constructivist pedagogy. The paper also proposes the important aspects such as various strategies and need based learning in teaching-learning process for adoption of constructivism approach in the classrooms, besides this it also outlines the learning strategies and learning design required for successful implementation of constructivism in teaching learning process.

The present paper focused on Constructivism approach for effective Teaching- Learning process with prime objectives are (i) To know the concept of Constructivism Approach. (ii) To understand the significance of constructivism in the Teaching-Learning process. (iii) To develop the Role of Teachers in implementing the Constructivism Approach in daily Teaching-Learning process.

The methodology of the research is a different type involving an interpretative, conversation and study secondary sources, like books, articles, journals, thesis, university news, expert opinion, and websites, etc.

Key Words: Constructivism Approach, Teaching and Learning

Introduction:

According to Mahatma Gandhiji, Education was not merely about gathering information or skills to earn a living. Main aimed of education is the complete development of an individual's character, intellect, physical fitness and spiritual self. Education is a plying significant for both the act of teaching knowledge to others and the act of receiving knowledge from someone else. Education is about developing learning skills and enhancing

knowledge. It also means helping people to learn how to do things and support them to think about what they learn in the situations. It's also important for educators to teach ways to find and use information. Education needs research to find out how to make it better.

Education is a continuous process also education involves the process of the development and learning of the child on multiple dimensions, facilitated by the teacher, who is guided by a curriculum. Effective education is a process where the teacher, children and the schools involved and participated actively. However our present education system emphasizes on preparing students for tests and don't foster deep learning and is in the midst of a crisis of quality-starting from primary schools to universities, the dominant view is that our students are not learning as much as they ideally should and what is more worrisome is that rote learning and memorization seems to be the dominant mode at all levels. Traditional teaching approach (lecture method) commonly adopted by teachers in Indian schools involves coverage of the context and rote memorization on the part of the students and does not involve students in creative thinking and participation in the creative part of activities.

Constructivism Approach:

The new upcoming trends in education changed the present scenario and adopted the constructivist approach which is moral and more focused on innovative activities and knowledge acquisition and therefore, the academic results of the students of constructivist classrooms are better than traditional classrooms. It was found that constructivist instructed students had higher scores than the students who were exposed to conventional method of teaching. The problem lies in the learning environment in a traditional classroom, the classroom environment is teacher centered which makes learning process boring for less competent students. Student's attention wanes frequently and they are not able to retain the information for long time-period and are often caught daydreaming, talking and pestering other students. The individual differences existing between learners, their background knowledge and learning styles are often ignored in the conventional classrooms. Present educational system provides a unique and standardized teaching material to all learners which tend to benefit to those whose learning style and background knowledge fits well with the teaching material. If the teaching style closely matches the students preferred style of acquiring knowledge, learning becomes easier and more natural, results improve and learning time is reduced. In few words, traditional teaching material and strategies generally tend to benefit some students more than others.

National Curriculum Framework (NCF 2005), also suggests adopting critical pedagogy because students are not just young people for whom adults should devise solutions. They are critical observers of their own conditions and needs and should be participants in discussion and problem-solving related to their education and future opportunities. Critical pedagogy provides an opportunity to reflect critically on issues in terms of their political, social, economic and moral aspects.

Objectives of the Study:

- (i) To know the concept of Constructivism Approach.
- (ii) To understand the significance of constructivism in the Teaching-Learning process.
- (iii) To develop the Role of Teachers in implementing the Constructivism Approach in Teaching-Learning process.

Researcher, finalized the above objectives for the present Research and focused on **Concept of Constructivism Approach:**

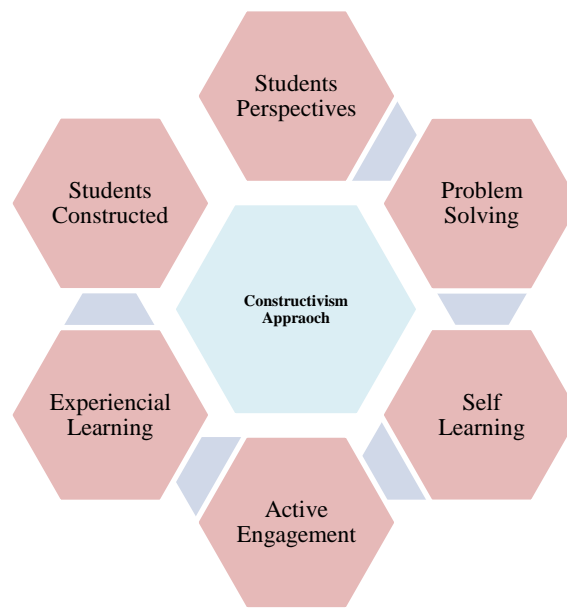
Constructivism Approach is the process that says learners create and develop the construct knowledge rather than just passively take in information. As people experience the world and reflect upon those experiences, they build their own representations and incorporate new information into their pre-existing knowledge.

"Constructivists allege that it is we who constitute or construct, on the basis of our theorizing or experience, the allegedly unobservable items postulated in our theories."

"The central principles of this approach are that learners can only make sense of new situations in terms of their existing understanding. Learning involves an active process in which learners construct meaning by linking new ideas with their existing knowledge".

Constructivism Approach for Enhancing Teaching-Learning Process:

- ✓ The improvement in learning outcomes is possible by shifting the focus of teaching learning process on concept development and deep understanding. Till now, most of the focus has been to ensure access to education.
- ✓ Therefore, a question arises on the philosophical underpinnings of the long dominant pretest-teach-post teach model of education. Despite completing all their tests, too many students simply are not learning.



- ✓ There arises a need to adopt a new pedagogy which encourages the learner to construct a sense of her own self, the development of her autonomy, alongside her progress within the group for interpersonal growth.
- ✓ Pedagogy is a vehicle of articulating learning goals and identifying the forms of activities that promote development toward those goals.
- ✓ Constructivist pedagogy is one such approach where activities are proposed to students that are meaningful for them and the learner reflects, searches, uses her capacity for taking initiatives and for being creative.
- ✓ Constructivist pedagogy in which activity supplements lecture, learners are provided opportunities to construct their own understanding on the basis of an interaction between what they already know.
- ✓ The need for constructivist approach arises when behaviorism fall short of producing positive effects within the complex context of the classroom and left teachers feeling shortchanged and cheated by a system that placed the guilt for students' failure to learn in their hands.
- ✓ Following the legacy of behaviorism, constructivism has been welcomed as a theory of knowing that more fully explains the complexity of the teaching-learning process.

Significance of Constructivism Strategy:

The present conceptual paper concentrates on providing an alternative pedagogy based on the principles of constructivism theory given by Piaget, Vygotsky and other theoreticians

including psychologists and sociologists. If we accept constructivist theory, then we have to give up platonic and all subsequent realistic views of epistemology. We have to recognize that there is no such thing as knowledge “out there”, independent of the knower but only knowledge we construct for ourselves as we learn is the true knowledge. If we believe that knowledge consists of learning about the real world “out there”, then the power of organizing and presenting the knowledge is passed on to the teacher who ultimately passes this on to the learner. In the process of disseminating knowledge to learners the teacher may use activities and opportunities to experiment but here the teacher is helping the learner to understand the world but don’t ask the learner to construct his/her own world.

- ✓ The understanding of the difference between the world “out there” and the students own world helps a teacher to decide the type of pedagogy he will follow to create a constructivist classroom.
- ✓ When the teacher structures situations for his/her students then she is restricting the learners to carry out their own mental actions. These two worlds, the world “out there” and “own world” puts the teacher in a dilemma of presenting the knowledge or to help students to construct their own knowledge.
- ✓ Teacher opting for the second option intensifies her problem because the curriculum designed by the experts, classrooms environment created and followed in a school, instructional design adopted by a teacher and learning habits of the students’ needs a major redesigning by the teacher.
- ✓ The theories of learning, strategies of teaching and learning and the pedagogies are the guiding principles in framing an instructional design. The instructional design following constructivist ideology avoids directing a pupil towards a solution to the problem rather it encourages self-conceptualization of the solution.
- ✓ There is a need to develop a learning design using constructivist learning strategies which follows the principles of social constructivism and also aims at developing social and emotional skills in students by using social constructivism in classrooms.
- ✓ The proximal goals of SEL programs are to foster the development of five interrelated sets of cognitive, affective, and behavioral competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision making.

Constructivist Teaching-Learning Approach for Teachers:

The constructivist learning approach can be developed using principles of social constructivism to improve academic achievement, high order thinking skills and social and emotional skills of the students. The constructivist environment in a classroom can be created by adopting the following:

1. Provide experience with the knowledge construction process

The teacher presents a topic to the learners and guides them to explore the topic through experimentation. The learners are encouraged to frame a research question and teacher helps them to answer the research question framed by them through scaffolding.

2. Experience in and appreciation for multiple perspectives

All learners are distinct from each other in their way of thinking and so the need arises to look at a problem from multiple perspectives and provide the opportunities to learners to experiment and discuss their alternative ways of thinking. Here, the students are encouraged to work in groups. Finally, all the groups can share their opinions on the topic with each other.

3. Provide social and emotional learning

The social and emotional aspects of learning will be taught to the students in an integrated manner. The five aspects of social and emotional learning which could be covered in the teaching are as follows: self-awareness, managing feelings, motivation, empathy and social skills.

4. Use multiple modes of representation

The multiple modes of representation also assist the goal of experiencing multiple perspectives. Use of multiple media to enrich the learning environment provides the learners to view the topic being discussed in the class from multiple dimensions.

The teacher should prepare a list of media available and supporting the topic. The teacher should also decide the use of media in supporting the authentic nature of the task.

A combination of the following learning strategies can be used by the teachers to create constructivist learning environment

- Use of multimedia/teaching aids
- Scaffolding
- Case studies
- Role playing

- Story telling
- Group discussions/Group activities (reciprocal Learning).
- Probing questions
- Project based learning
- Use of learning strategies for social and emotional learning of students.

The teacher can follow the under mentioned learning design while conducting group work or in general

Situation: A situation will be presented to the students to work upon.

Bridge: The teacher tries to know the existing knowledge level of the students and tries to find out the gap in the existing level and the level where they should reach at the end of discussion. This is carried out with the help of suitable questions and activities.

Grouping: The students are then divided into groups to explore the problem presented in their own perspective. Here the students of varying perspectives will be included in a group.

Questions: The teacher may adopt the strategy of probing questions to assist them move towards their goal.

Exhibit: The students are expected to exhibit or explain their understandings regarding the topic to other students.

Reflections: Students present their reflections on the entire process of building understanding of the topic.

Constructivist Approach and Role of Teacher:

The role of the teacher in the constructivist classroom is to help students to build their knowledge and to control the existence of students during the learning process in the classroom. Further, the pedagogical goals determined to construct a constructivist learning environment are as follows:

- Provide learning experience with the knowledge construction process.
- Provide learning experience in and appreciation for multiple perspectives.
- Embed learning in realistic and relevant contexts.
- Encourage ownership and voice in the learning process.
- Embed learning in social experience.
- Encourage the use of multiple modes of representation.
- Encourage self-awareness of the knowledge construction process.

A constructivist classroom is one in which students are given opportunities to learn through their experiences and develop deeper understanding than they would if they were simply taught the information.

Conclusion:

The imbibe of education needs to be shifted from placing content in students' centric knowledge building. Teaching-Learning focus of studying could be turned from filling one's mind to producing knowledge products, students wouldn't need to concentrate on memorization and cramming for examinations. New knowledge products could be in form of essays, term papers, project reports, research papers, videos, posters, slides, portfolios, or whatever products that students might create. In using constructivism approach in the classroom instruction there is a need of integration of formal, theoretical, practically and self-regulative knowledge. However, in a traditional type of curriculum these different types of knowledge have been treated separately. The aspect of assessment cannot be left untouched while talking of constructivism as constructivist learning requires an entirely different approach to assessment, an approach that is qualitative in nature. The emphasis is on Students' Learning Process (SLP) and on their meaning making as much as on the final product for individual development.

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