



Effect of Constructivist Approach in Education: An Analytical Review

Neelam Suman* and Sangeeta Chauhaan

Department of Education, Babasaheb Bhimrao Ambedkar University, Lucknow, Uttar Pradesh, India

*Corresponding author: neelamsuman10@yahoo.com

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ABSTRACT

NCF-2005 emphasizes using constructivism in education to improve students' learning. Similarly, according to NCFTE-2009, in order to make student learning simple and sustainable, teachers should be given teaching training to use constructivism in the classroom. Now the students in NEP-2020 have been given the freedom to learn on their own through a completely constructivist approach. The main reason for this is that the constructivist approach has proved to be very positive and effective in comparison to other approaches related to education in the past and present times. Research on other educational approaches was found to be less effective in student learning than constructivism. Csizmadia found in his research that student's autonomy does not play a vital role in problem solving and knowledge formation, while students' autonomy has a positive effect on his computational thinking. He found that learning conditions play an important role in learning. Izwita Devi found in her research that the mathematics learning ability of Grade VIII students was increased by using constructivist based geometric learning material. S. Mahesha found in his research that the educational achievement of students in geography increased by using the constructivist method. Similarly, Ranu Mandal found out as a result of his research that the constructivist approach plays an important role in increasing the learning of secondary level students.

Keywords: Constructivism, learning, autonomy, education

Various efforts are being made to increase student learning in education. In this sequence NCF-2005 considers the methods of learning of the student as the main one and emphasizes

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that the way students get more learning in the same way teachers should try to teach. The students' curriculum should be based on this. According to NCF-2005 the student is the creator of his own knowledge, the student tries to understand the environment around him, so he should be given the opportunity to learn on his own in the classroom. He can learn according to his own. Thus, NCF-2005 is focused on effective use of the constructivist approach.

In NCF-2005 emphasis has been laid on the constructivist-based learning of the students whereas NCFTE-2009 an attempt has been made to focus on teacher training to make the student learn on the basis of the constructivist approach. According to which the teacher should be trained in the social political environment, so that they can connect the student to the social background. The curriculum should be near the student's knowledge and learning tricks. So, they can learn easily on his own. NCFTE-2009 emphasized on making learning using various activities (like play, debate and experiment) in education. It is centralized on the constructivist-based teacher training to enhance and improve students' learning. In which teachers are taught there how they can do various activities in effective way for a particular topic In this student perform according to the spontaneous activity. So that the student stand at the door of learning and try to learn the unit taught on their own. In constructivist learning the teacher plays the role of a guide and facilitator who provides the facilities to the student which are necessary for the learning point of view and the teacher also explains the selecting unit to them easily when it is asked and questioned by the student. In NEP-2020 emphasis has been laid on teaching learning through constructivist method by following the 5+3+3+4 educational pattern.

Objectives

1. To review the educational researches based on the effect of constructivist approach in education.
2. To analyze the effect of constructivist approach on the basis of the reviews.

Educational Researches based on Constructivist Approach

Andrew Csizmadia *et al.* (Jan 2019) found in his research that learner autonomy is not important to defining the problems and building the knowledge. Computational thinking is directly related to the learner's autonomy. The condition of learning is more important in learning.

Izwita Devi, *et al.* (2016) found in his research that Mathematics reasoning ability of class eighth students has increased to normal limits by using constructivist based geometric learning material.

Yetz Temli Durmus, *et al.* (July 2016) found in his research that the teachers demanded a special separate classroom which is full of audio-visual teaching-learning aids. Similarly, the

Turkish learners demanded study material, disposable materials, internet connection, and computers for learning based on the constructivist approach.

Rafia Zareen, *et al.* (2014) found in his research that the constructivist approach provides the stable learning in the cognitive aspect of the student. Studying Biology in the constructivist perspective gives higher secondary students easier and more sustainable learning.

Ranu Mondal (2013) found in his research that Using a constructivist approach resulted in a significant increase in secondary students' learning levels.

Mahesh S. (2014) found in his research that Using the constructivist approach the academic achievement of class 8th students increased in Geography subject.

R. Nagalaxmi (2011) found in his research that the constructivist approach makes learning easier due to which the student gets more learning than the traditional method. Secondary level students learning in Science can be significantly enhanced by using the constructivist approach.

Analysis of the Effect of Constructivist Approach in Education

Various researchers conducted study on the constructivist approach, all of them found constructivism to be effective and positive for the selected subject and sample which definitely increases student learning.

Reviewed Researches	Researches with Positive Effect of Constructivism	Researches with Negative Effect of Constructivism	Constructivist Effectiveness	Successful Researches %
7	7	0	Positive and High	100%

RESULTS

Constructivist approach was used in teaching-learning of various subjects like Geometry, Biology, Geography and Science of different educational levels of students. In all the described research the constructivist approach increased student learning and made it simple and accessible.

CONCLUSION

The researcher reviewed some research based on the constructivist approach. In all research the constructivist approach is effective for all students and subjects. Various research done on the constructivist approach as a summary of its result shows that if any subject is taught through the constructivist method, then the learning of students will be easy, effective and stable.

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