

# A Study On Teachers' Perception On Constructivist Approach Of Teaching In Classroom Practices

**Astha Mishra**

Teacher

Veer Public School , Gurgaon , India

## Abstract

*The purpose of this study is to explore and understand teachers' perception and effectiveness of constructivist approach in their classroom practices. It also focuses on suggesting ways of effective classroom teaching through constructive method based on the actual experiences of teachers. Constructivism in teaching learning is primarily associated with when individuals are involved in building their own ideas and opinions. When pupils bring their own experiences, ideas and opinions within the learning environment to gain an effective comprehension of concepts, then they put into practice constructivism. In constructivist learning, students are well-informed and form their own goals and objectives. To achieve the objectives of the study, survey method was used which consisted of responses from experienced and preservice teachers. Teachers who participated in the survey had positive and comprehensible perception of the actual classroom practices and meaning of constructivist theory.*

**Keywords:** *Effective Teaching, constructivist approach, Teaching – learning process, Traditional approach.*

## Introduction

Constructivism is a modern learning theory that states that knowledge is created by the learner. In constructivism, students explore learning environment in order to construct knowledge, they do not passively read or listen to the teacher (Schunk, 2012). So, active learning, where students are responsible for their learning and construct knowledge is effective learning to get knowledge and understanding the concepts (Powell & Kalina, 2009). Constructivist learning environment as stated by Uredi (2013) “an environment where active participation of students to real-life experiences have been provided and problem-based situation have been created to improve conceptual change”. There are many methods and

models which represent constructivist approach for learning. For example, discovery learning, inquiry-based teaching, peer-assisted learning, discussion and debates, reflective teaching, using feedback, and so on, are the methods used in constructivist learning environment (Schunk, 2012). According to constructivism, knowledge is not learned as an external fact but it is learned internally through pre-knowledge. In constructivist learning, teachers provide and facilitate the learning environment. Baviskar, (2009), states, “The role of the teacher is to encourage the learner to learn”. This motivation consists of providing resources, asking appropriate questions, asking at the appropriate time, and connecting those questions and resources with the learner's prior knowledge. Thus, teachers assume

the responsibility of teaching for learning, and students themselves attempt to learn using the teacher's instruction. For instance, a teacher can ask a question for which there is no direct answer, a teacher tells the student that there are no grades for the answer, students attempt to find out the answer, which will lead to the construction of knowledge.

The constructivist approach to teaching and learning emphasizes the importance of students' active participation in the learning process and the creation of their own knowledge through interaction with their environment. Teacher perceptions of this approach can vary depending on the subject matter and their expertise and it is important to understand how effectively the approach is being implemented. Currently, teaching effectiveness is sought through different avenues and via different tools (Sattam, 2019).

The requirement to understand and improve teaching effectiveness is met by a variety of methods, including teacher self-assessment, student reflection, peer evaluation, and administrative assessment. Additionally, it's critical to comprehend teachers' perspectives on the qualities that leads to good teaching.

## **Review Of Literature**

Constructivism is a modern learning theory based on Piaget and Vygotsky theories. It is characterized by four characteristics: knowledge construction, cooperative learning, metacognition and authentic learning task. Knowledge is constructed through interaction with others in society, with the help of a teacher or other fellow student. Metacognition involves self-regulating processes, while knowledge construction involves the learner himself constructing knowledge by

discovering. Schunk (2012) states that knowledge is constructed inside an individual and is not an external phenomenon to be achieved. Piaget's theory of constructivism states that knowledge is represented as schema (thought) and is formed in the mind on the basis of pre-existing knowledge. There are two perspectives to constructivism: cognitive or individual constructivism and social constructivism. According to Piaget, there are four stages of cognitive development that a child goes through.: sensorimotor, pre-operational, concrete operational, and formal operational. In the very first stage that is Sensorimotor stage, involves sensing physical tools and environment, pre-operational stage involves language skills, concrete operational stage involves logical reasoning, and formal operational stage involves formal reasoning. Social constructivism is the basis for individual-work and group-working methods. Vygotsky argued that knowledge is constructed through interaction with others, such as teacher-student or student-student collaboration. Constructive learning is an appropriate form of social constructivism in which knowledge is learned and absorbed through social interactions. Constructive learning environments are those in which students actively engage in learning, link their real-world experiences to knowledge, and change conceptual understanding through problem posing. Constructive learning environments differ from traditional or primitive classroom settings in that: The teacher engages with students by asking for their opinion , assessment is linked to the teaching, students often work in teams and interact with one another and the primary focus is on building knowledge.

The constructivist learning environment is an educational application of constructivism that involves students actively participating in a

sense-making knowledge construction. The key instructional strategies employed in constructivist learning settings are cooperative learning, discovery learning, and inquiry-based teaching. Baviskar et.al. (2009) has written four criteria to understand whether a method is constructivist or not. Group work is a constructivist way of learning and is connected to social constructivism. It is used for tasks that are time consuming for one person and involves social interaction and collaboration. Teachers should ensure that each group has reasonable results in their work and provide guidance. Schreiber and Valle (2013) have written that constructivist group-work is the one in which members are assigned carefully and tested individually and collectively. Students engage in higher-level thinking through the process of discovery learning, which is a form of inductive reasoning. According to Mayer (2004), “Guided discovery learning has better and more effective learning outcomes compared to discovery learning”. According to Carrijo et al. (2009), “Constructivist individual learning” explains that when a learner learns a mathematical procedure, “the knowledge is acquired through exploratory action or experience of an individual”. Inquiry teaching comes from the Socratic teaching method. The teacher asks general principles and applies them to a particular situation. This method is used to test hypothesis, make predictions, and distinguish between required and sufficient circumstances. Both the teacher and the student should have a basic understanding of what is to be discussed during this process. A question-based answer is a great tool for teaching. However, it depends on how the teacher construct it. The question-based answer should provide a hint for the student as to what to learn. It should affect students who have learnt, how much they have learnt, and take wait time into account. A constructivist method

is a method that meets four criteria: eliciting prior knowledge, providing a hint for student what to learn, affecting students who learnt and how much they learnt, and considering wait time.

Schunk (2012) and Baviskar et.al. (2009) both claim that group work or other methods may or may not be constructivist. According to them, “Constructivist teaching strategies are ones that fit the following four criteria: Retrieving prior knowledge, create cognitive dissonance, utilize knowledge with feedback and reflect on learning students’ outcomes and involvement. These criteria are important to distinguish a real constructivist method from a simple activity in the classroom.

### **AIMS**

The constructive approach aims to encourage students to take an active role in their learning by engaging in problem-solving, critical thinking, and other activities that require them to actively construct their knowledge. This approach emphasizes collaboration and cooperation among students, as they work together to solve problems and construct knowledge. This study investigates teachers’ perceptions of effective teaching qualities to find similarities and differences that could cause disparities, common misperceptions, and incorrect interpretations. It is hoped that by familiarizing with teachers’ perceptions, better academic and pedagogical practices can be generated. Our goal is to investigate how teachers apply the constructivist method of learning and how they perceive it. The following objectives have been chosen in order to investigate the purpose of the study.

### **Research Objectives**

The objective of the constructive approach is

to empower students to take ownership of their learning, develop their own ideas and solutions, and become independent thinkers and problem solvers. To achieve the objective following research question have been addressed:

To identify teachers' perceptions with regard to effectiveness.

To identify ways in which teachers' experiences could inform the development of better academic strategies and pedagogical practices.

To provide recommendations for improving teachers' experiences based on research findings.

## Method

The methodology of this study was based on a quantitative research approach where questionnaires were used as well as structured observations to collect data. To know the teacher perceptions of the constructivist approach to teaching and learning, we designed a survey that asks teachers about their perceptions of the constructivist approach. The survey can include questions such as:

1. What does the constructivist approach mean to you?

a) Discussion method b) Teacher centric method  
c) Problem-solving method d) Learning by doing

2. How do you feel about the constructivist approach?

a) Problematic for teachers b) Beneficial for learners  
c) Less effective than traditional method d) Better retention and understanding

3. Do you think the constructivist approach promotes a deeper understanding of the subject

matter?

a) Yes b) No c) May be d) No idea

4. In your opinion, as a teacher/student what are the benefits of using the constructivist approach in the classroom?

a) Promotes Interaction b) Students are the constructor of their own knowledge  
c) Teacher student relationship is strengthened d) Promotes divergent thinking

5. In your opinion, what are the drawbacks of using the constructivist approach in the classroom?

a) Creates chaos b) Teacher is not able to pay equal attention to each learner  
c) Time consuming d) Requires trained teachers

6. How important do you think it is for students to be active participants in their own learning process?

a) Important b) Very crucial c) Not necessary  
d) No idea

7. As a teacher have you ever used the constructivist approach in your classroom? If so, can you provide an example.

8. How effective is the constructivist approach in promoting student learning?

a) Very effective b) Not so effective as students have different understanding level  
c) Better than traditional approach d) Not at all.

9. How would you compare constructivist approach to other teaching approaches that you have used or developed so far?

a) It is more effective than other approaches

- b) It is more interactive than other approaches
- c) It enhances problem solving skills
- d) Syllabus completion is a challenge as it is time consuming

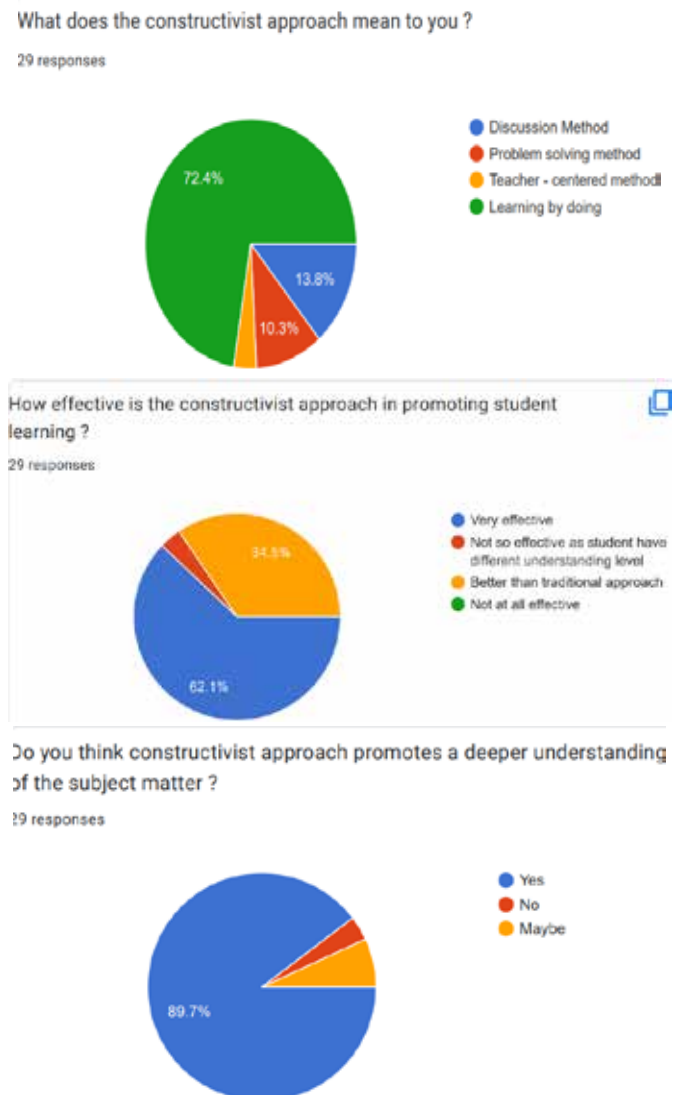
10. What advice would you give to a teacher who wants to implement the constructivist approach in their classroom?

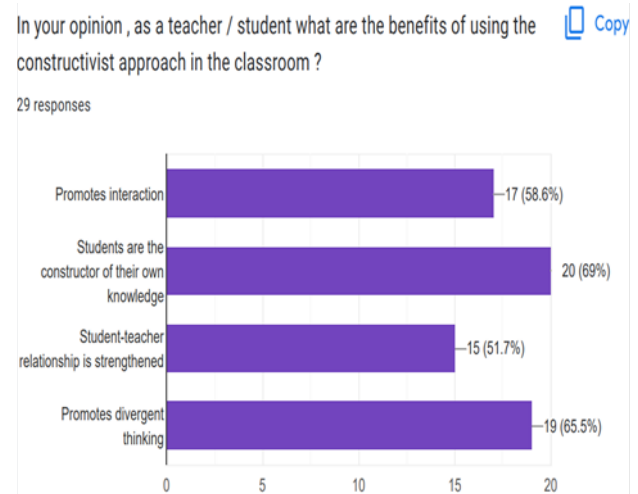
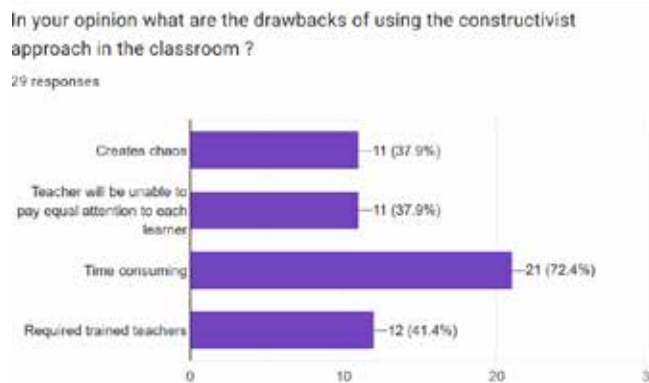
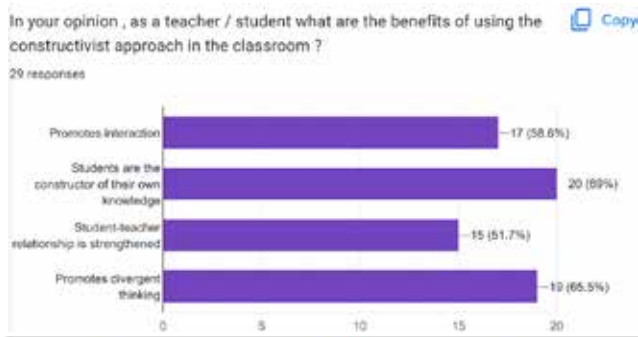
After collected the survey responses, we analysed the data to identify patterns and trends in the perceptions of teachers. Look for areas of agreement and disagreement, as well as differences in perception based on factors such as experience, and subject area. Further, based on survey results, we need to identify areas where the implementation of the constructivist approach can be improved. This might involve providing additional training for teachers, modifying instructional materials, or adjusting classroom practices to better align with the approach.

**Result**

From the responses that were received, majority of them have clear and good understanding of the constructivist approach, as 72% have said that it is learning by doing, which is the essence of the approach. A good number have the view that is a creative and effective method which promotes critical and divergent thinking, that paves the way for the students to construct their own perceptions and understanding of the topic. However, few also opined that it is a time-consuming method. For the next question, 89.7% supported that it promotes a deeper understanding of the topic and as per the benefits, there were mixed responses, of which 69% are of the view that under this method students are the constructor of their own knowledge, 65.5% viewed that it promotes divergent thinking, 58.6% opined that it promotes interaction while,

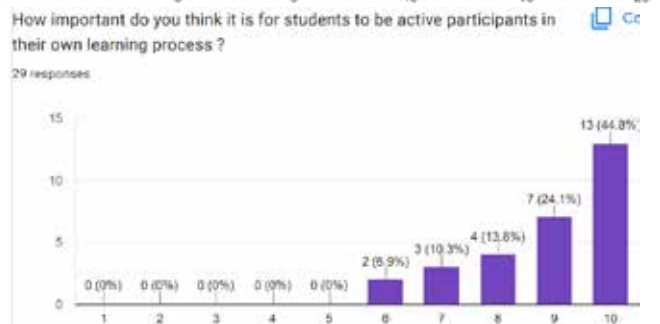
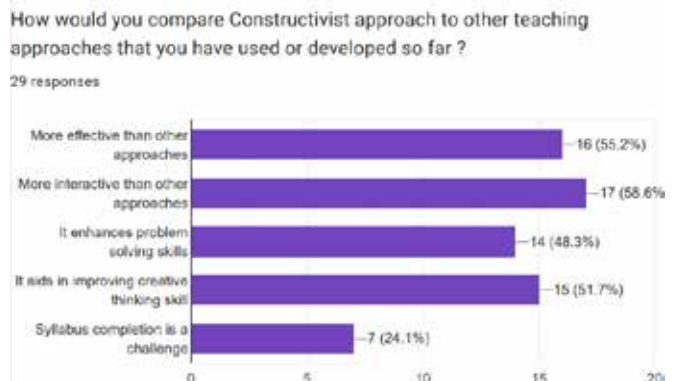
51.7% supported that it strengthened teacher-student relationship. Regarding the drawbacks, a considerable proportion, i.e., 72.4% opined that it is time consuming and 41.4% supported that it required trained teachers. As regards to the effectiveness of the method, 62.1% supported that it is very effective and 32.5% responded that it is better than traditional approach.





For the comparison of the constructivist approach to other approaches, there were mixed responses. With 58.6% viewing it as more interactive, 55.2% as more effective, 51.7% as improving creative skills and 48.3% as enhancing problem solving skills. Also 24.1%opined that syllabus completion is a challenge under this method. Talking about students’ active participation and rating it on a 10 points scale, 44.8% gave a 10-points rating followed by 24.1%, 13.8%, 10.3%

and 6.9% as 9, 8, 7, 6 points rating.



During the survey, many respondents shared their experiences of using it and consisted of both positive and negative views. The positive ones included- it is interesting, creative, interactive and enjoyable. While the negative ones were- it is time-consuming, chaotic, management issues and successful for small group.

**Suggestions**

The survey puts forward the following suggestions and advices for both the teacher and the students as well-

**For teachers**

1. Know your learners well.
2. Be open to varied responses from the learner, take wrong responses positively.
3. Be a professional and master your content knowledge.

4. Teachers should be well prepared to implement this approach. Good organization skills are required. Time management plays a crucial role. Further, the activities should be well planned.

5. Try in smaller batches first. Go slow and gradual. Teaching using a new approach should be transitional.

### For students

1. To interact more and clear out their doubts. The more you interact the more u learn.

2. Participate in group discussions, give your views, share your thoughts even though not so confident.

3. Try experimenting with the concepts learned, this will make the learning process more enjoyable.

4. Compare classroom learning to real life scenarios, to build knowledge.

### Conclusion

Teachers' opinions of the constructivist method of teaching and learning can offer important views into how well the method is being used and where it can be improved. The research discovered that both experienced teachers and aspiring teachers have very favourable opinions of the study's recommended teaching aspects. The analysis of the data shows that almost all of the study participants had a positive perception of constructivist teaching approaches, and the following conclusion was reached based on the main findings. The educators' perceptions, however, differ. Additionally, it was stated that the teachers were confident that constructivist teaching methods would help their students learn more effectively and openly demonstrate their thoughts; they consider constructivist methods to be crucial.

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