

## Constructivism Learning: A Way to Make Knowledge Construction

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### ABSTRACT

Constructivism is an epistemological view of knowledge acquisition which emphasize on the active role of the learners in the construction of knowledge and interpretation of reality. This paper describes about the constructivist teaching learning process on the way to construction of understanding. It demonstrates how learners construct their own knowledge and making sense of information in a constructivist classroom. It also pays focus on the importance of constructivist teaching methods and the teaching–learning environment of constructivist classroom with the changing roles of students and teachers in the class room.

**Keywords:** *Constructivism Learning, Construction, Knowledge, Learners.*

The field of education has undergone a significant shift in thinking about the nature of human learning and the conditions that best promote the varied dimensions of human learning. Certainly one of the most influential views of learning during the last two decades of the 20<sup>th</sup> century is the perspective known as constructivism.

In the view of constructivists, pupils should no longer be passive recipients of knowledge supplied by teachers and teachers should no longer be purveyors of knowledge and classroom managers. The role of the learner is conceived as one of building and transforming knowledge. For the learner to construct meaning, he must actively strive to make sense of new experiences and in so doing must relate it to what is already known or believed about the topic. Student develop knowledge through an active construction process, not through the passive reception of information. **NCF,2005** favours the role of student as an active constructor of knowledge, teacher's role as a facilitator, guide and classroom as an atmosphere for active exploration and further states that the teaching and assessment methods should be constructive.

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## CONSTRUCTIVISM VIEW OF LEARNING:

Constructivism, “a in contemporary psychology, epistemology, and education” (von glaserfeld, 1997, p.204), is a broad term used by philosophers. Curriculum designers, psychologists, educators, and others. Most people who use the term emphasize “the learner’s contribution to meaning and learning through both in individual and social activity” (Bruning, Schraw, & Ronning 1999, p.215). Constructivist perspectives are grounded in the research of Piaget, Vigotsky, the gestalt psychologists, Bartlett, and Bruner as well as the educational philosophy of John Dewey, to maintain just a few intellectual roots.

*“Constructivism view that emphasizes the active role of the learners in building understanding and making sense of information.” (woolfolk, A.2007).*

Although constructivism embraces many theoretical perspectives on learning and does not itself suggest particular pedagogy. The view takes learner agency as a given and has spawned a wide range of pedagogic strategies by which learners can be encouraged and enabled to select and transform information, construct their own hypotheses and can be active in their own learning.

This approach to learning impacts strongly on view of the teacher’s role. By emphasizing the interaction between the learners and the activity, the focus moves away from teacher and the content to learning mechanisms and learners cognitive processes. From a constructivist perspective, teachers need to adopt the role of facilitator. In order for the child to successfully learn new science ideas. It is necessary to bring to light their already existing ideas about natural phenomena. This information provides the teacher with an understanding of ways in which the old ideas may interfere with the present interactions.

“I hear and I forget. I see and I remember. I do and I understand.”- Confucius. These words of Confucius clearly states what constructivism means. In content to the transmission of knowledge model of teaching. Newer understanding of how people learn present a conception of teaching that focuses on developing ‘thinking’ students who understand and can use what they learn. This conception is termed “constructivism” because it sees learning as a dynamic internal process in which learner actively “construct” knowledge by connecting new information transferred to them from external sources. Constructivism means is a learner constructs her own understanding of a concept/knowledge. This conception is termed "constructivist", constructivist approach says that knowledge is constructed from a base of previous knowledge, experiences and exploration related to that concept/knowledge. Children are not a blank slate and knowledge cannot be imparted without the child making sense of it according to his or her current conceptions so give them several opportunities to solve a wide variety of concrete and abstract problems related to the concept/knowledge. Working out for her each problem can be dealt with; such thinking would be done individually or in groups, because learners are the builders and creators of meaning and knowledge.

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The term refers to the idea that individuals. Through their interaction with the environment construct their own knowledge and meaning. It has a metaphorical reference to construction, meaning there by that human beings are builders, shapers and designers who have been creating artifacts from simple pots to skyscrapers. The constructivist paradigm as advocated by Piaget and Bruner, stresses that whatever gets into the mind has to be constructed by the individual through knowledge discovery. Thus learning is 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.

### **BASIC ASSUMPTIONS OF CONSTRUCTIVISM:**

- Knowledge is actively constructed by the learner, not passively received from the environment.
- Much human activity is devoted to ordering process the organizational patterning of experience.
- The organization of personal activity is fundamentally a self-reliant one.
- Individuals cannot to understand apart from their organic embeddedness in social and symbolic systems.
- All of his active, meaningful and socially embossed self-organization reflects an ongoing development flow in which dynamic dialectical tensions are essential.

### **TEACHING – LEARNING ENVIRONMENT OF CONSTRUCTIVIST CLASSROOM:**

A Constructivist classroom obviously operates in the backdrop of constructivist learning environments and key principles of constructivism. In the constructivist classroom focus tends to shift from the teacher to the student. The constructivist teacher sets up problems and monitors student exploration, guides the direction of student enquiry, and promotes new patterns of thinking. Brooks and Brooks (1993) States that a constructivist classroom should bear the following characteristics:

- Student's autonomy and initiative are accepted and encouraged.
  - The teacher asks open-ended questions and allows wait time for responses.
  - Higher level thinking is encouraged.
  - Students are engaged in dialogue with the teacher and with each other.
  - Students are engaged in experiences that challenge hypotheses and encouraged discussion.
  - Students are construct understanding around core concepts and big ideas.
  - Students construct meaning through interaction with others, with materials and by observation and
- The constructivist learning is the present need. We need our pupils to become active and independent learners and discover of the knowledge instead of remaining passive listeners in the classroom. There are many approaches which can be used as a constructivist approach some of them are:
- Concept mapping
  - Problem solving
  - Investigatory approach
  - Social inquiry approach

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Before teachers apply above mentioned approached in the classroom, they must ensure that these should not be grafted on traditional methods of teaching, these need a change in the culture a set of norms, attitudes, beliefs and practices that constitute constructivist culture.

### KNOWLEDGE CONSTRUCTION

Students are not blank slates upon which knowledge is etched. They come to learning situations with already formulated knowledge, ideas, and understandings. This previous knowledge is the raw material for the new knowledge they will create. Knowledge as constructivist believed is situated in the real world .constructivists argues that knowledge is constructed by learners and that any account of knowledge makes essential references to cognitive structures. Knowledge comprises active systems of intentional mental representations derived from learning experiences. Each learner interprets experiences and information in the light of their present knowledge, learners use these factors to organize their experience and to elect, transform new information. It recognizes the construction of new understanding as a combination of prior learning, new information and readiness to learn. Learners make choices about new ideas to accept and how to fit them into their established views of the world. *Immanuel Kant elaborates* this idea by asserting that human beings are not passive recipients of information. Learners actively take knowledge, connect it to previously assimilated knowledge and make it their own interpretation (*cheek, 1992*).

### CONCLUSION:

The constructivist view of the world gives new status to the learner as the dynamic constructor within the learning activity instead of being the passive respondent to externally determined world of learning. Constructivism provides students to observe and inquire the firsthand information and then an opportunity to reflect upon it. This understanding calls for changes in the process, contexts, and content of teacher education – changes guided by constructivist pedagogy that educate teachers to be learners themselves. Hence constructivism as a teaching theory has important meanings for education of the future generations that focuses on improving students' comprehensive quality.

### REFERENCES

- Black, A., & Ammon, P. (1992). A developmental - constructivist approach to teacher education. *Journal of Teacher Education*, 43 (5), 323-335.
- Bonnstetter, R. J. (1998). A constructivist approach to science teacher preparation. Adraft concept paper. Nebraska: University of Nebraska. Retrieved September 9, 2013, from. <http://tc.unl.edu/rbonstetter/constructu.html>
- Brooks, J.G and brooks, M.G.(1999).In search of understanding: the case for constructivist classroom. Alexandria,VA: Association of supervision and curriculum development.
- National Curriculum Framework (2005). NCERT, New Delhi.
- Mukesh T.(2012).Constructivism: Teaching the way children learn. *Edusearch* 3(2),p.10-16

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Woolfolk,A.(2007).Educational psychology(6<sup>th</sup>edition); Alan and becan private limited, new Delhi,p.275

### ***Website:***

<http://www.funderstanding.com/piaget.cfm>

<http://www.artsined.com/teachingarts/Pedag/Constructivist.html>

[http://www.uib.no/People/sinia/CSCL/HMM\\_Constructivism.htm](http://www.uib.no/People/sinia/CSCL/HMM_Constructivism.htm)

[http://www.thirteen.org/edonline/concept2class/month2/index\\_sub1.html](http://www.thirteen.org/edonline/concept2class/month2/index_sub1.html)

<http://edutechwiki.unige.ch/mediawiki/index.php?title=Constructivism&oldid=43386>

[http://en.wikibooks.org/wiki/The\\_Practice\\_of\\_Learning\\_Theories/Constructivism](http://en.wikibooks.org/wiki/The_Practice_of_Learning_Theories/Constructivism)

[http://en.wikibooks.org/wiki/Individual\\_Knowledge\\_and\\_Negotiated\\_Meaning\\_\\_A\\_Constructivist\\_Classroom](http://en.wikibooks.org/wiki/Individual_Knowledge_and_Negotiated_Meaning__A_Constructivist_Classroom)

[http://www.saskschools.ca/curr\\_content/constructivism/what/looklike.html](http://www.saskschools.ca/curr_content/constructivism/what/looklike.html)