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**CONSTRUCTIVIST LEARNING PEDAGOGY IN CLASSROOM PRACTICE: A STUDY AMONG
PRIMARY SCHOOL TEACHERS OF HIMACHAL PRADESH****Kalpna Saroj**

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Abstract

Construction of knowledge is a process of constructivist learning, where learners actively construct their own new knowledge on the bases of prior experiences and understanding. Constructivism is not a theory about teaching, it is a theory about knowledge and learning. The teachers and learners should interact with each other and interpret and construct the hidden knowledge by inquiry-based learning, problem-based learning, co-operative learning, collaborative learning, and cognitive apprenticeship pedagogical model. The present study is an attempt to explore the usage of constructivist learning pedagogy by school teachers of Kangra district of Himachal Pradesh. The method used for study was descriptive research method in which survey was the technique employed. The sampling technique used for the study was purposive sampling technique which comes under the non-probability sampling. The total sample of the study includes 26 school teachers in primary and secondary schools of Kangra district of Himachal Pradesh. The tool used for the study consists of a set of questions which explore the deferent aspect of teaching and learning based on the concept of constructivist pedagogy. The items of the questions were validated to ensure the construct and face validities. The collected data were analyzed using the online software usablestats.com to find out the t-value and accordingly derived valid conclusion. Findings of the study revealed that regarding the usage of constructivist learning pedagogy teachers of the Kangra district of Himachal Pradesh, most of them are using constructivist learning pedagogy in their day to day classroom discourse. It was also found that there is no significant difference exists in the usage of constructivist learning pedagogy with respect to their gender, management, and experience. The findings of the study reflect that the constructivist pedagogy employed in school education will help them to engage their teaching according to the nature of the constructivism which will bring forth great fruits into the visionary goals of school education including bridging teaching and research with extension.

Keywords: management, and experience, constructivist learning

Introduction

Historical emergence of constructivism has its roots from the early days of nineteenth century. It has emerged as a result of contradiction to

behaviorism theory. At that time there was an influx of better understanding of the human mind. Constructivist learning is a process of knowledge construction, where learners actively

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construct their own new knowledge on the bases of prior experiences and understanding (Khader, 2005& NCF, 2005). Constructivist theories refer to the knowledge that is constructed at individual level and as well as at social level (Phillips, 1995). Although Brooks & Brooks (1993) state that *constructivism* is a theory which deals with knowledge and learning, not with teaching. Knowledge is defined as temporary, developmental, socially and culturally mediated therefore it is considered as non-objective. Glasersfeld (1995) supported this view and stated that constructivism simply claims to give a firm 'Conceptual base' for those 'Inspired teachers' who had no theoretical foundation. It does not claim to have made any significant discovery in education. This is not a method of teaching; it is a process of learning. Knowledge is not passively received from others; it is actively constructed by learners (Taber, 2006). Hilav (1990) claimed that teachers and learners should interact with each other and interpret and construct the hidden knowledge by inquiry-based learning (Amineh and Asl, 2015). In this process, learners are creators of meaning, interpretations and also explain any events and phenomenon and are involved in constructing a real world of knowledge.

Pedagogy is the most important component of teaching-learning process. Knowles (1980) highlighted pedagogy as "the art and science of teaching children" and in other words, it is teaching method for children. Teaching is affected by rules and principles of pedagogy and their effective activities lead to productive learning. It provides help to learners for academic achievement and acquiring a level of higher order thinking through classroom activities, interaction and events (Pritchard & Woollard 2010). Constructivist pedagogy is not a specific method of learning; it involves multiple

dimensions of learning aspects. In *problem-based learning*, learners are involved in solving a problem rather than achieve a certain level of mastery. Scardamalia and Bereiter (1996) also supported the above view and state that the basic requirement of education should be "construction of collective knowledge in problem-based learning". In addition to that *cooperative learning* provides an approach to teaching which is conducive to the development of the skill required for a changing world and its benefits are well documented. There are three major benefits of co-operative learning: higher achievement and greater productivity, more positive relationships and greater psychological health, social competence and self-esteem (Jha, 2009). *Collaboration* is a process that gets people working together in a new way. The process does not end but spawns new collaboration ventures. Collaboration becomes a continuing phenomenon with a wide of results that empower people and system to change (Winer and Ray, 1994).

The cognitive apprenticeship pedagogical model is based on constructivism that is essential part of education development. It provides learning activities which targets face to face interaction, coaching to students who want to develop specific project management career skills. According to Collins et al., (1989, p. 456) "learning-through-guided-experience on cognitive and meta cognitive, rather than physical, skills and processes." It's more precise and accurate way of the overall development of students. Constructivist classroom is democratic, where the relationship of learners and teacher is co-operative and their environment is not competitive. Their teaching-learning process is child centered not teacher centered and teacher is a facilitator not source of knowledge and he / she shares the responsibilities of each learner. Their goal is

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productive outcome (Kalpna, 2014). Learner actively constructs the meaning making, generate the new idea, interpreting any situation and developing their own concept on the basis of prior existing ideas and experiences (NCF, 2005). Gray (1997) proposed that the learners' active participation in construction of meaning and knowledge determines the learning upon which constructivist teaching is dependent. In this process, teacher does not transmit knowledge to learners but provides opportunities and facilities and encourage self-regulated learning, critical thinking. Teacher provide facilities, environment, and create problem in classroom. Learner can solve these problems on the bases of acquired previous experiences. The teacher is facilitator, guide, director and co-explorer who promotes learner to challenge and their own critical thinking, creativity, formulate new idea, opinion and conclusions (Ciot, 2009; Ismat, 1998; Richardson, 1997). In constructivist learning process, learners have to be involved. They are not supposed to be inactive in the process of accumulating any information. Learners directly face learning conditions or context and construct real meaning through cognitive process and social interaction from peer group and environment.

Significance of the study

In the annual report 2014-15 of Ministry of Human Resource Development, Government of India, it was mentioned that education system is child-friendly and inclusive and teaching learning process should be constructivist in nature.....Singh (2013) proposed that in view of the joint review mission on teacher education, West Bengal, and Uttar Pradesh's teaching approaches are child centered as constructivism, CCE, inclusive classroom, exclusion, contextualization and gender parity. Every state has been urged to renew its own

state curriculum in light of NCF 2005 recommendations, by bringing in cohesive changes in their curriculum, teaching learning material, pedagogy and assessment systems. Twenty three states so far have renewed their curriculum based on NCF 2005; ten states have followed the curriculum of NCERT. The present study is an attempt to explore the usage of constructivist teaching learning activities in the classroom practice. Through this study the researcher can find out the current constructivist pedagogy in classroom and the future teachers will explore the importance of introducing the concept of process based education in school education system.

Objective of the study

The major objective of the present study is:

- To find out the usage of constructivist teaching learning activities in the classroom practice of school teachers with respect to Gender, Management, and Experience.

Hypotheses of the study

The hypothesis formulated for the investigation of the research study were

- There is no significant difference in the usage of constructivist teaching learning activities in classroom practice of school teachers with respect to their gender.
- There is no significant difference in the usage of constructivist teaching learning activities in classroom practice of school teachers with respect to management of the school.
- There is no significant difference in the usage of constructivist teaching learning activities in classroom practice of school teachers with respect to their experience.

Methodology

The method used for study was descriptive research method in which survey was the technique employed. The sampling technique used for the study was purposive sampling

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technique which comes under the non-probability sampling. The total sample of the study includes 26 school teachers in primary and secondary schools of Kangra district of Himachal Pradesh. The tool used for the study consists of a set of questions which explore the deferent aspect of teaching and learning based on the concept of constructivist pedagogy. The items of the questions were validated to ensure the construct and face validities. The collected data were analyzed using the online software

usablestats.com to find out the t-value and accordingly derived valid conclusion.

Analysis of the study

The data collected using the five point rating scale to explore the usage of constructivist pedagogy in classroom practice among the school teachers teaching in different district of Kangra in Himachal Pradesh were analyzed and based on the analysis and discussions the following conclusions were arrived.

Table 1: Mean, SD & t-value of school teacher with respect to gender

Category	Number	Mean	S.D.	t value
Male	05	77.6	15.40	0.705
Female	21	72.66	05.56	

Table (1) shows the mean scores obtained for the male and female school teachers regarding the usage of constructivist pedagogy in classroom practice which were 77.6 and 72.66 respectively. The standard deviation scores obtained for male and female school teacher are 15.40 and 05.56. The t value obtained was 0.705 which is not significant at 0.05 level.

Accordingly the first hypothesis stated that there is no significant difference in the usage of constructivist teaching learning activities in classroom practice of school teachers with respect to their gender was accepted and which implies the level of usage of constructivist pedagogy in classroom teaching & learning is same for both male and female teachers.

Table 2: Mean, SD & t-value of school teacher with respect to management

Category	Number	Mean	S.D.	t value
Government	08	77.25	12.45	1.151
Private	18	72	5.01	

Table (2) shows the mean scores obtained for the government and private 77.25 and 72 respectively. The standard deviation scores for government and private school teachers regarding the usage of constructivist pedagogy in classroom practice as 12.45 and 05.01. The t value obtained was 1.151, which is not significant at 0.05 levels. Accordingly the second hypothesis stated that there is no

significant difference in the usage of constructivist teaching learning activities in classroom practice of school teachers with respect to the management of the school was accepted which implies level of usage of constructivist pedagogy in classroom teaching & learning is same for both Government and Private school teachers.

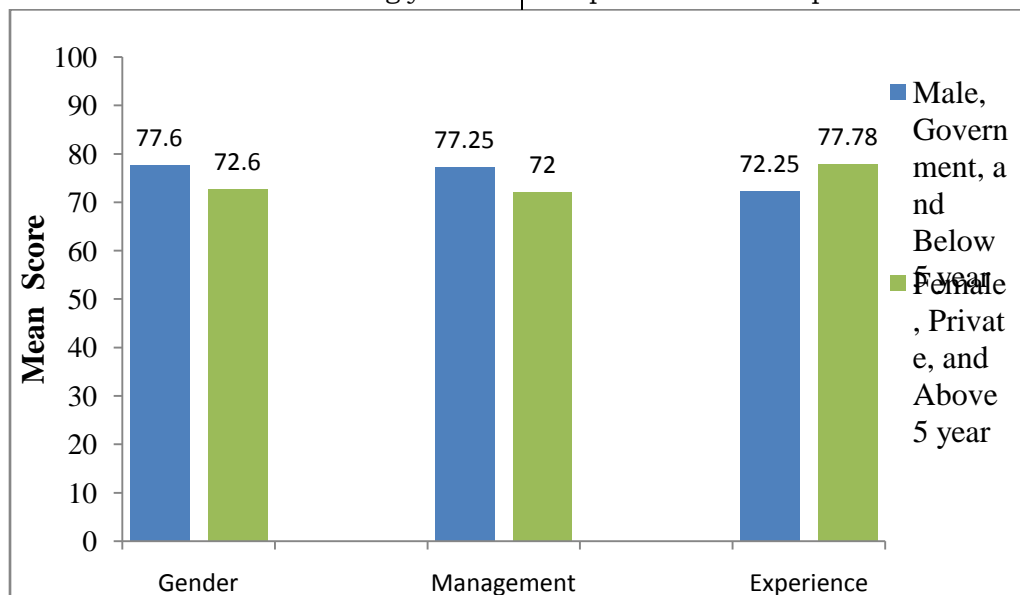
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Table 3: Mean, SD& t-value of school teacher with respect to experience

Category	Number	Mean	S.D.	t value
Below 5 year experience	12	72.25	6.51	0.806
Above 5 year experience	14	74.78	9.43	

Table (3) shows the mean scores obtained for the school teachers having below 5 year teaching experience and those who have above 5 year teaching experience with regard to the usage of constructivist pedagogy in classroom practice were 72.25 and 74.78 respectively. The standard deviation scores for obtained 6.51 and 9.43. The t value obtained was 0.806, which is not significant at 0.05 level. Accordingly the

third hypothesis stated that there is no significant difference in the usage of constructivist teaching learning activities in classroom practice of school teachers with respect to their experience was also accepted which implies the level of usage of constructivist pedagogy in classroom teaching & learning is same for teachers having above five year experience with respect to their counterparts.

**Figure 1: Graph showing usage of constructivist pedagogy in classroom of sub-sample****Findings and discussions of the study**

All findings of the study revealed that the with respect to the usage of constructivist teaching learning activities in classroom practice of school teachers in different schools of the district Kangra of Himachal Pradesh, it was also found that there is no significant difference existing in the usage of constructivist pedagogy with respect to their gender and management and experience. These finding were supported

by the following findings of the study done by Jubile (2007) on Effectiveness of Constructivist Approach on the Achievement and Problem Solving Ability in Science of VII Standard Students, where constructivist approach was found effective for both boys and girls in improving their achievement in science. Another study done by Harani (2008) on Effectiveness of Constructivist Based Approach for Teaching Mathematics at Secondary Level also suggested

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that there is no significant difference between boys and girls in their achievement in mathematics among the experimental group after the intervention.

Conclusions of the study

Based on the analysis, discussions and findings of the study the followings conclusions were derived. All the results shows that in the usage of constructivist pedagogy there is a high level of

constructivist learning activities in classroom practice done by school teachers. The findings of the study reflect that the constructivist pedagogy employed in school education will help them to engage their teaching according to the nature of the constructivism which will bring forth great fruits into the visionary goals of school education including bridging teaching and research with extension.

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