

Effectiveness of Constructivist Approach in Teaching Learning of History in terms of Interest

Dr. Vanita Anand

Assistant Professor, Department of Education, Maharaja Surajmal Institute, New Delhi, India

Email - vanitaanand08@yahoo.com

Abstract: *In the constructivist perspective, learning is a process of the construction of knowledge. Learners actively construct their own knowledge by connecting new ideas to existing ideas on the basis of materials/activities presented to them. Constructivism places the learner at the centre stage. Learning becomes the focus rather than teaching. Learning implies constructing meaning and constructing a systems of meaning. Thus, a TE program is required that can equip the teacher for creating a learning environment to suit constructivist approaches and be more responsive to changes in the school system as it envisages this significant paradigm shift. The constructivist approach is relevant to all subjects of study but more particularly to study of History. Students' interest level in history is often hard to raise, as they tend to see these topics as outdated and distant from their personal interests and concerns. Hence, a need was felt to study the effectiveness of constructivist approach on the student teachers, who can, in turn, apply it in their classrooms. The effectiveness of Constructivist Approach was studied on Interest, of the student teachers. 62 students of Kalka Institute for Research and Advanced Studies constituted the sample of the study. A quasi-experimental design was utilized. Students were randomly divided into experimental group and control group. The experimental group was taught using constructivist approach (Inquiry Guided Learning) while the control group was taught using the conventional approach (talk and chalk). The data was analysed quantitatively.*

Key Words: *Constructivist Approach, Behaviourist Approach, Interest, Teaching-learning of History, Constructivist Learning Environment.*

1. INTRODUCTION:

Education in India is in a state of transition. Many researches have been undertaken to study the effect of constructivist approach on the teaching learning process and to compare it with behaviourist and cognitivist approaches ever since the NCF 2005 recommended the paradigm shift from behaviourism to constructivism.

“In the constructivist perspective, learning is a process of the construction of knowledge. Learners actively construct their own knowledge by connecting new ideas to existing ideas on the basis of materials/activities presented to them (experience).”

The focus of all educationists, researchers and policy makers is to enhance and smoothen learning thereby making it a natural, effortless, meaningful and joyful endeavour. Constructivist paradigm describes the process of learning as meaning-making, in which individuals construct mental models that ground their understanding in a deeply personal and unique fashion. The approach most prevalent until the recent times was behaviourism. It was believed that the approach based on behaviourism emphasizes that the purpose of teaching-learning is to bring about desired changes in the learner's behaviour through a lot of drill and practice, thereby concentrating on knowledge acquisition that is observable or measurable in certain concrete ways. Constructivism, on the other hand, is a philosophy of learning that emphasizes that by reflecting on our past experiences, we construct our own understanding of the world that we live in. Each of us creates our own mental models, which are used to make sense of our experiences. Learning, thus, is the process of adjusting our mental models to accommodate new experiences that we come across. Constructivism places the learner at the centerstage. Learning becomes the focus rather than teaching. Learning implies constructing meaning and constructing a systems of meaning.

The NCF-2005 requires the teacher to be the facilitator of student's learning in a way that the student is helped to construct knowledge for himself/herself. For this, teacher education must engage the theory along with field experiences to help the trainees view knowledge not as external to the learner but as something actively constructed during learning. Teachers need to be trained in organizing activity based, learner centered, participatory learning experiences.

Thus, a TE program is required that can equip the teacher for creating a learning environment to suit constructivist approaches and be more responsive to changes in the school system as it envisages this significant paradigm shift.

The constructivist approach is relevant to all subjects of study but more particularly to study of History. History textbooks are often tempered with, saffronised and present subjective views. To add to the confusion, the theories keep changing, challenging age old beliefs. Thus, there is a need to explore ways History teachers can make their subject more practical by creating opportunities for their students to become socially engaged and create History as a Historian does, with the help of the primary sources, and in the process begin to build citizens who are willing to take a stand on issues, by getting into their genesis and who can appreciate the power of individual voices and the dignity of national identity and national pride.

Students' interest level in history is often hard to raise, as they tend to see these topics as outdated and distant from their personal interests and concerns (Hoagland, 2000). More importantly, teachers of History often wonder why their subject is not impacting students' attitudes towards social engagement and responsible citizenship (Gupta, 1953; Yilmaz, 2009). Sometimes, it is not the subject itself that pupils do not like, but the way it is handled by some teachers that the students tend to lose interest. This leads to the role of Teacher Training Institutions, which must produce the versatile, duty-conscious and innovating History teacher to revolutionise History teaching to make History alive to pupils (Sarpong and Kofi, 1993).

Therefore an attempt is made here to explore ways by which History teachers can make their subject more practical by creating opportunities for their students to become socially engaged, and in the process begin to build citizens who are willing to take a stand on issues by getting into their genesis and who can appreciate the power of individual voices and the dignity of social engagement and national identity and national pride. This is in keeping with the Objectives given by C.B.S.E for teaching history at the secondary level.

An equally pertinent concern is the tampering of History textbooks for political vested interests. Providing the students with the original documents and utilizing Constructivism is an effective way to counter the problem whereby the students are creating their own History. They have the sources to bank upon for their construction of the events that took place in the past.

Moreover a review of the available literature shows that the researches on the effectiveness of Constructivism are mainly in the subject areas of Mathematics and Sciences and hence there is a dire need of researches to establish the impact of Constructivist approach in the areas of Social Sciences, particularly in History as History can be best understood with the help of the original sources and documents.

The present teacher education system in the country is being guided by National Curriculum Framework for Teacher Education, 2009 which envisages a major paradigm shift in teaching from behaviourism to constructivism. It is said, 'one teaches the way one is taught'. Therefore, in order to ensure the implementation of the constructivist approach in the classrooms, there is a dire need to train the prospective teachers in the constructivist approach so that they are in a position to implement it in their classrooms. Hence, a need was felt to study the effectiveness of constructivist approach on the student teachers, who can, in turn, apply it in their classrooms.

2. OBJECTIVES:

- 1 To study the effectiveness of constructivist approach on the level of interest of student teachers in learning History.
 - 1.1 To study the level of interest of the student teachers of control group and experimental group in pre test.
 - 1.2 To study the level of interest of the student teachers of control group and experimental group in post test.

3. HYPOTHESIS:

There is no significant difference in the student teachers of control group and experimental group with respect to their scores in the interest inventory.

4. MATERIAL AND METHODS:

POPULATION

All the students enrolled in B.Ed Programme in colleges of Delhi having opted Teaching of Social Science as one of the method course comprised the population of the study.

SAMPLE

Sample of the present study comprised of all the students(62) of B.Ed of Kalka Institute for Research and Advanced Studies (GGSIPU) who had opted for Teaching of Social Science as one of the method course comprised the sample of the study.

TOOLS USED FOR THE STUDY

a) CLES: Constructivist Learning Environment Survey

Constructivist Learning Environment Survey (CLES) (Taylor, Fraser, & White, 1994) was used to measure whether constructivist approaches were presented in the classrooms learning environment.

Each form contains 25 items altogether, with five items in each of the five scales. The response alternatives for each item are Almost Always, Often, Sometimes, Seldom, and Almost Never

Dimensions of the Scale:

1. Personal Relevance
2. Uncertainty
3. Critical voice
4. Shared Control
5. Student Negotiation

b) 2. Interest Inventory

Interest Inventory was administered to measure the interest of students towards History prior to and after the experimental intervention.

An Interest Inventory was made based on the following dimensions:

1. Relevance
2. Satisfaction
3. Confidence
4. Attention
5. Involvement

c) 3. Teaching Plans

Constructivist Teaching plans were prepared using 5 E Learning Cycle Model based on Needham's five phase Constructivism Model.

5. DELIMITATIONS

The study was delimited in the following ways:

- The study was confined to pre service teacher education programmes offered through face to face mode only.
- Only the Inquiry Guided Strategy has been used for teaching-learning of History.

6. RESULT AND DISCUSSION:

Analysis of Pre Test and Post Test Data Related to Interest

To test this hypothesis, mean and standard deviation were calculated to find out the significance of difference between the scores of control and experimental group in interest inventory administered before and after the intervention.

Furthermore, the scores of USSESS and Interest Inventory were taken as covariates to partial out the effect of social status and scores of students on pre-test of interest inventory and to make sure that the scores of post-test of interest inventory are not affected by the social status and the pre test scores of students on interest inventory.

Table 1 : Analysis of Mean Scores related to Interest in Pre Test

Group	N	Mean	Standard Deviation	t-value
Control Group	31	108.55	18.308	0.2881*
Experimental Group	31	109.84	16.927	

*Not significant at 0.05 level of significance

From table 1, it may be perceived that the mean score of Interest of control group and experimental groups on pre test of interest inventory is 18.308 and 109.84 respectively. The standard deviation of control group and experimental group is 18.308 and 16.927 respectively. The value of calculated t (0.2881) being less than the table value of t at 0.05 levels with df 60, the difference between the two means is not statistically significant at .05 level. Hence, both the groups were found to be equal on their level of interest before the experimental intervention was given in terms of their interest in the Teaching of History.

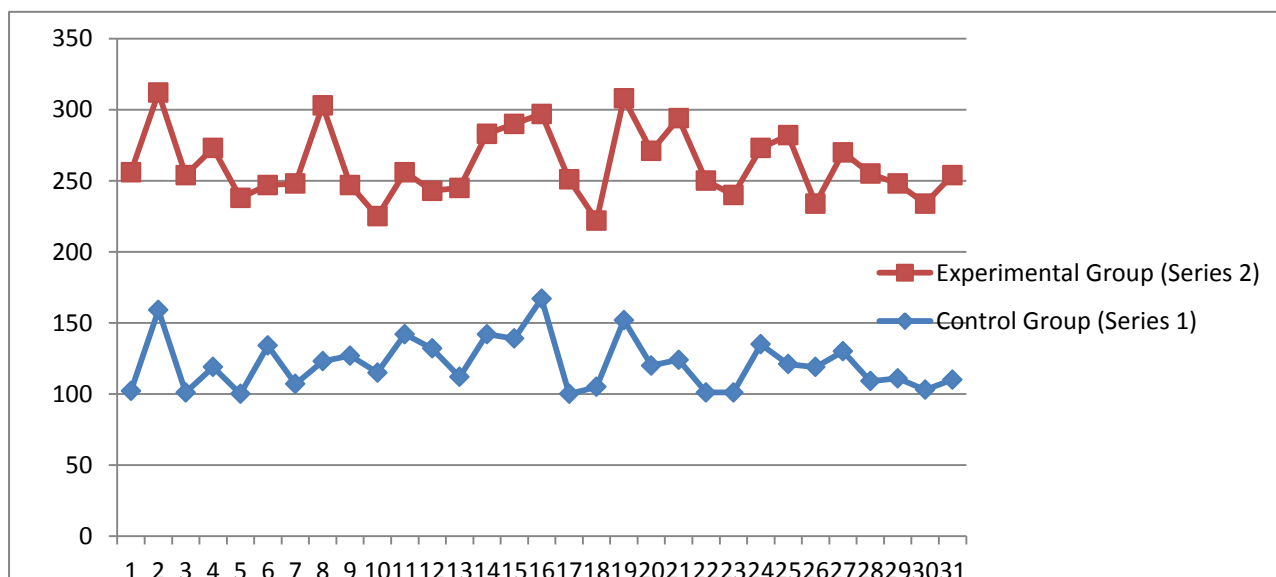
Table 2 : Analysis of Mean Scores related to Interest in Post Test

Group	N	Mean	Standard Deviation	t-value
Control Group	31	121.35	18.302	4.0876*
Experimental Group	31	140.03	17.676	

*Not significant at 0.05 level of significance

From table 2, it may be perceived that the mean score of Interest of control group and experimental groups on post test of interest inventory is 121.35 and 140.03 respectively. The standard deviation of control group and experimental group is 18.302 and 17.676 respectively. The value of calculated t (4.0876) being more than the table value of t at 0.05 levels with df 60, the difference between the two means is statistically significant at .05 level. Hence, experimental group was found to be statistically better than the control group on their level of interest in learning History after the experimental intervention was given in terms of their interest in the Teaching of History.

The post test scores of Interest of experimental and control group are graphically represented in fig 1.

Figure 1: Graphical Representation of the Interest Post test scores of the students taught through Conventional approach and Constructivist approach

Analysis of Post Test Scores Related to Interest Taking Scores of USSESS and pre test interest scores as Covariates

To ensure that the difference on the interest inventory in the post test stage is not the effect of pre test scores and the USSESS, the pre test scores and USSESS scores were taken as covariates. Before that, the mean, standard deviation and standard error mean were calculated for interest inventory-pre test, interest inventory post test, and USSESS and tabulated in table 4.8.

Table 3: Mean Scores Related to Interest Pre Test, Interest Post Test and USSESS

	Groups	N	Mean	Std. Deviation	Std. Error Mean
USSESS	Experimental Group	31	60.58	9.760	1.753
	Control Group	31	62.68	10.384	1.865
Interest Scale-Post test	Experimental Group	31	89.39	9.106	1.635
	Control Group	31	140.03	17.676	3.175
Interest Scale-Pre test	Experimental Group	31	121.35	18.302	3.287
	Control Group	31	109.84	16.927	3.040
Interest Scale-Pre test	Experimental Group	31	108.55	18.308	3.288
	Control Group	31	108.55	18.308	3.288

In order to make sure that the interest inventory scores of the students of control and experimental groups on post test of interest inventory were not affected by the social status of the students and the pre test scores of students on the interest scale, the scores of USSESS and pre test scores on interest inventory were taken as covariates and ANCOVA was used to compare the interest inventory scores of control and experimental group after the experimental intervention.

To compare the post-test scores of experimental and control groups on interest inventory, the significance of difference in the mean scores was calculated using the test of analysis, ANCOVA as shown in table 4

Table 4: ANCOVA: Interest Inventory Scores After partialling Out the Effect of Interest Inventory Pre-test and USSESS

ANCOVA ^{a,b}								
				Experimental Method				
				Sum of Squares	df	Mean Square	F	Sig.
Interest Scale-Post test	Main Effects with Covariates	(Combined)		14015.231	3	4671.744	25.057	.000
		Groups		4855.319	1	4855.319	26.041	.000
		Covariate	Interest Scale-Pre test	8395.163	1	8395.163	45.027	.000
	USSESS		.000	1	.000	.000	.999	
	Model		14015.231	3	4671.744	25.057	.000	
	Residual		10813.946	58	186.447			
	Total		24829.177	61	407.036			

a. Interest Scale-Post test by Groups with Interest Scale-Pre test, USSESS

b. Covariates entered with main effects

Table 4 shows the values of the variance ratio, F which furnishes an overall test of significance of difference among means. The F ratio was found to be significant at 0.05 level. Hence, the null hypothesis was rejected and it was concluded that the difference in the mean scores of Experimental and Control group was due to the effect of experimental intervention. The difference between the mean scores of experimental and control groups are significant after partialling out the effects of Interest scale pre-test and USSESS. This shows that the students of the Experimental group became interested in the study of History when taught through Constructivist approach in comparison to the students taught through conventional method.

The findings are in consonance with the findings reported by Meena(2007), Jackson(2006), Hoagland(2000) and Sarpong and Kofi (1993).

Although initially the experimental group students resented putting too much time and effort in research but gradually as they got more and more involved, they became interested in the content and became enthusiastic about sharing their findings. The students reported to have found History interesting and intriguing while referring to the original documents.

7. IMPLICATIONS OF THE STUDY:

The study has great implications for classroom learning both for the learners and the teachers.

- The teacher educators in the pre service teacher education programmes should adopt constructivist approach to teaching-learning History as it leads to higher level of achievement among the student teachers. Besides, it also leads to increase in the proficiency in the parameters namely brainstorming, web evaluation, organization, basic content, discussion content, critical thinking and reflection.
- The use of constructivist approach not only enhances the cognitive domains but ensures an enhancement in the affective domain like interest. It is thus in consonance with the major aim of education, i.e. the all round development of the learner.
- It is imperative to initiate the student teachers into the concept as well as the actual application of constructivist approach into the classrooms. For this, teaching plans must be prepared and applied using the constructivist approach during the teaching practice.
- Conferences, workshops and seminars should be held as a part of in-service programmes to train the teachers in constructivist approach.

- In order to invoke interest in the study of History, the student teachers should be taught by the constructivist approach whereby they can themselves deal with the primary documents and create History. This would surely improve the interest of student teachers towards the study of History.
- For the better retention of concepts and for long lasting and meaningful learning, the constructivist approach should be utilized as constructing knowledge would ensure the better understanding and more meaningful knowledge construction thus ensuring learning that is long lasting.
- NCF 2005 recommended the utilization of Constructivist approach in the year 2005 and even after 10 years, the approach is not applied in the actual classrooms. Therefore, there is a dire need to make it mandatory for the teachers to apply constructivist approach in the classrooms.
- Constructivist approach should be used for all other subject areas at all levels of teaching and learning as researches undertaken in this area have established the effectiveness of this approach over the conventional approaches.

REFERENCES:

1. Brooks, J.G., & Brooks, M.G. (1993). *In search of understanding: The case for constructivist classrooms*. Alexandria, VA: Association for Supervision and Curriculum Development.
2. Brown, J. S., Collins, A. & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18, 32-42.
3. Bruner, J. (1996) *The Culture of Education*, London, Harvard University Press
4. Glasersfeld, E. von (1989). "Cognition, Construction of Knowledge and Teaching." *Synthese*, 80(1), 121-140.
5. Gupta, D.L.P. (1953). An investigation into the present apathy towards teaching and learning of History in our schools. Ph.D. in Education, Bihar University. 1953. Abstract in M.B.Buch(Ed) *A Survey of Research in Education*, Baroda, CASE M.S. University, 1974, pp 281-282
6. Hoagland, Matthew A. (2000 Spring). *Utilizing Constructivism in the History Classroom*. Social studies Practicum, Bloomington. Retrieved Oct 22, 2005, from http://eric.ed.gov/ERICDocs/data/ericdocs2/content_storage_01/0000000b/80/24/2b/c6
7. Jackson, S.R.,(2006). *Using Constructivists Methods to Teach Social Studies to Special Education Students* (master's thesis). Retrieved from ted.coe.wayne.edu (Document ID ED 7999)
8. Jonassen, D. & Rohrer-Murphy, L. (1999). Activity theory as a framework for designing constructivist learning environments. *Educational Technology: Research and Development*. 46(1).
9. Meena, N.R. (2007). *Developing a teaching learning programme in Science based on Constructivist Approach*. (Unpublished dissertation). University of Delhi, New Delhi.
10. NCERT (2005), *National Curriculum Framework for School Education*, NCERT, New Delhi
11. Richardson, v. (Ed.), (1997). *Constructivist teacher education: Building a world of new understandings*. London: Falmer.
12. Rogers, C. R. (1983a). As a teacher, can I be myself? In *Freedom to Learn for the 80's*. Charles E. Merrill Publishing Company, Ohio.
13. Sarpong and Kofi (1993). *Why I like history : Ciskeian secondary school pupils' attitudes towards history*. Master's Thesis. Rhodes University, Grahamstown.
14. Taylor, P. G. (2000). Changing Expectations: Preparing students for Flexible Learning. *The International Journal of Academic Development* 5(2), 107-115
knowledge.sagepub.com/view/communicationtheory/n83.xml
15. Wertsch, J.V. (1997). *Vygotsky and the formation of the mind*, Harvard University Press, Cambridge.
16. Yilmaz K. (2009). *Primary School Teachers' Views about Pupil Control Ideologies and Classroom Management Styles*. *Cypriot J. Educ. Sci.* 4:157-167

WEB REFERENCES:

<http://www.learningandteaching.info/learning/constructivism.htm>
<http://www.radicalpedagogy.org>