

Constructivism and Its Approach of Teaching Social Science at Secondary Level– A Critical Survey in Telangana Region

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Abstract

This study aimed at exploring the attitude of secondary level social science teachers towards the usage of constructivist approach in their classroom teaching. Finding of the study revealed that majority of the secondary level social science teachers preferred to use constructivist approach in their classroom teaching as suggested that massive orientation programmes are to be organized, for the school teacher to understand and appreciate the baseline philosophy of constructivism and its proper application in teaching learning process.

KEYWORDS:- Behaviorism, Cognitivism, Constructivism, Approach, Social Sciences

Introduction

Throughout the history, education is considered as an important instrument for development in all spears of human and social living. Education, particularly quality education in any given society reflects the quality of living of its people. Indian education has undergone many changes due to several socio-political considerations to meet the emerging needs of the society particularly during the pre and post-independence period. It is strange to observe that the changes brought into Indian education system have failed to respond to its societal needs causing an unprecedented dissatisfaction regarding the relevance of education among the cross section of its people. Thus, achieving education for all with quality has emerged as a need and challenge before educational planners and practitioners in India.

National Curriculum Framework-2005 (NCF-NCERT) was an attempt at the national level to provide a roadmap for the quality school education. The constructivist approach that the national curriculum framework envisages the quality concerns in school education. The baseline philosophy of this constructivist approach was to enable each and every child not only to facilitate them to think but also build a structure of knowledge. This endeavour will ultimately translate one's vision of creating a knowledge society a reality.

The quality concerns in school education demand a change in the teaching activity of the teachers. The change in teaching requires a paradigm shift from the traditional methods of teaching to the innovative strategies including the integration of technology, etc. The shift from traditional methods to new innovations in teaching strategies will definitely result in achieving quality in education. The advent of constructivist approach in teaching is a new development in our Indian classroom context. Though there is lot of material available which delineates about the constructivist approach as an effective teaching learning strategy. However, not many studies were

conducted so far in this country, how best the constructivism in teaching by the classroom teacher facilitates effective and accelerated learning among the students. Keeping this in view, the present researcher made an attempt to observe transacting the content of social science in a constructivist approach and its corresponding impact on the learning of the students. The emerging results of such a study will definitely facilitate the educational planners in general and more particularly the classroom teachers at secondary level to use this approach extensively in order to achieve quality in education. Accordingly, the curriculum planners and the classroom teachers will have a paradigm shift in their domain of academic activity.

Prevailing Perceptions of the Social Sciences

The popular perception of social science is that it is a non-utility subject. As a result low self-esteem governs the classroom-transaction process with both teachers and students feeling disinterested in comprehending its contents. From the initial stages of schooling, it is often suggested to students that the natural sciences are superior to the social sciences, and are the domain of 'bright' students. Therefore, there is a need to emphasize that the social sciences are essential to provide social, cultural and analytical skills required to adjust to an increasingly interdependent world and to deal with political and economic realities.

There is a widespread belief that social science merely transmits information and thereby it centered on the text which is required to be memorized for examinations. The content of these textbooks are considered to be unconnected to daily realities. In addition social science is viewed as providing unnecessary details about the past. It is also felt that the examination paper rewards the memorization of these superfluous 'facts' with the children's conceptual understanding being largely ignored. Any effort to address the information overload in the social sciences will simultaneously have to review the current examination system.

The social science curriculum has hitherto emphasized on developmental issues. These are important but not sufficient to understand the normative dimension like issues of equality, justice, and dignity in society and polity. Teaching of the social science has thus been linked up to the role of an individual in contributing to this 'development'. In view of this gap, there is a need to achieve a shift in focus from utilitarianism to egalitarianism that would address the normative concerns as mentioned. There is an urgent need to restore self-esteem to the social sciences by having themselves to address social and political issues in such a way as to awaken in the students a real concern for social justice. Courses in history have often ignored many sections of the society and many regions of India, and it needs to be corrected. The study of history should enable the learner to understand the past, which will make them to appreciate the present and facilitate them to look at the future with a scientific view.

Concept and Perspectives of Constructivism

A sound theory of education ultimately rest upon a sound philosophy. The theory and practice of education reflect the philosophical tenants of a

philosophy with which the system of education is conceived. As education being ever progressive system and aim at meeting the learners and societal needs always the system is subjected to scrutiny not only to ensure its relevance but also see that it develops along with other subsystems of the society. Accordingly the educational thinkers and planners put forth their efforts and wisdom in modifying the existing practices and to add new strategies to make education relevant to the life. A cursory look at the changes taken place in education during the modern period enable us to identify few significant events which were emphasized. They are behaviorism, Cognitivism and constructivism. When we review the theoretical bases of these approaches one will come across a contending views for example, behaviorism focused more on the learner as an end product of behavioural modification. Education instead of leading the learning process, it should also focus on the source of the knowledge and its acquisition process etc. Further the cognitivist approach ultimately aimed at individual learners' acquisition of knowledge instead of enabling them to know about the nature of the knowledge, the source of knowledge and validity of the knowledge. This approach in education emphasized more upon stuffing the mind of the child with some information without making them how to make use that knowledge for life situations. The cognitivist orientation to education ultimately resulted in making the individual like a Robot instead of making them a complete being.

In such a perplexing situation the educational planners in the country opted for constructivist approach in education. In this process, over a period of time, lot of intellectual discourses took place across the country and ultimately realized that the constructivist approach is a panacea to many of the ills that the present day Indian Education is suffering with. The purpose of education today is not just to make the student well informed but it is the responsibility of the system to prepare the individual to face the challenges of the 21st century more particularly in the context of LPG. This can be attended to a greater extent by way of making the individual learner to think and to construct the images of reality in the context of their own abilities and socio-cultural backdrop. This approach ultimately focused on the popular concept of "Individualized" education.

Therefore, it is necessitated to look into the historical backdrop of constructivism along with its philosophical bases and their implications to education.

Constructivism though a recent focal point of discussion in education in our country, it has a long history beginning from early Greek thought and has its traces in our ancient Indian Philosophy. However keeping in view the scope of the study it is restricted to the recent definitions and expressions of constructivism so as to understand its educational implications more particularly their relevance in the Indian context.

The review of available literature on constructivism indicates that there are multiple perspectives on this concept. In educational context it is not fair to accept any one perspective leaving others views on constructivism. However an attempt has been made here to identify some of the important and relevant definitions in the context of education.

The fundamental distinction in constructivism is that while behaviourist view, knowledge as something that happens in response to some external factors and cognitivist view knowledge as abstract and symbolic representation inside the learners head, constructivist view knowledge as constructed internally by each individual. Here the view of knowledge differs from the “Knowledge as given and absolute” as perceived by behaviourist. Constructivist focuses on knowledge construction but not on “Knowledge Reproduction”.

Need of the Study

In the passing era, needs and desires of people and society are changing. The old and traditional approaches are not enough for one’s new needs, so it is necessary that one should adopt some new paradigm to teach and learn.

Since the late 1980’s, there has been increased interest in non-traditional teaching and learning paradigm, one such paradigm views learning as an active construction of concepts and teaching as a supporting role for this construction. This cognitive perspective of learning is called ‘constructivism’. Every child is a potential learner, it is the duty of teacher that he provides them opportunities to learn more effectively.

Children are not blank slates. They have their own views and concepts regarding everything. In constructivism, students construct his/her knowledge based on his/her prior knowledge. They remain active throughout the learning and follow pluralistic approach, and sharing of thoughts. Teachers adapt the transformation approach.

This theory is being popular in European countries, but now the efforts of adopting use of constructivism in teaching are made by educational policies and National Curriculum Framework (NCF)-2005 throws light on constructivism. All children are naturally motivated and capable of learning. They can construct their own knowledge. NCF has suggested that curriculum should be reorganized in constructivist manner and school administration and teacher should adopt it as soon as possible according to the need of the country and the society. So it is appropriate time to focus on re-engineering the educational technology and to anticipate the need of the day that would decide the tools of tomorrow.

Objectives of the Study

The present study has been taken up with the following objectives

- 1) To study the extent of classroom management on the perception of teachers in using constructivist approach in teaching social sciences at secondary level.
- 2) To study the extent, the use of constructivist approach by the teachers in their teaching learning activities at secondary level.
- 3) To study the extent of constructivist approach followed by the teachers in assessing the performance of their students.

HYPOTHESES OF THE STUDY

- 1) There is no statistically significant difference in the perception of male and female secondary school teachers with respect to classroom management in the context of constructivist approach.
- 2) There is no statistically significant difference in the perception of male and female secondary school teachers with respect to their teaching learning activities in constructivist classroom.
- 3) There is no statistically significant difference in the perception of male and female secondary school teachers with respect to student assessment in constructivist classroom.
- 4) There is no statistically significant difference in the perception of secondary school senior teachers and junior teachers with respect to classroom management in constructivist approach.
- 5) There is no statistically significant difference in the perception of secondary school senior teachers and junior teachers with respect to teaching learning activities in constructivist classroom.
- 6) There is no statistically significant difference in the perception of secondary school senior teachers and junior teachers with respect to assessment in constructivist context.

Delimitations of the Study

As stated earlier, the present research was aimed at to investigate the impact of constructivist approach on teaching social sciences. Hence, this study too had certain constraints of space, time and resources as may be the case in any such similar studies.

- 1) The area of investigation was restricted to study the perceptions of teachers of social sciences only in the Telangana region.
- 2) Owing to paucity of time, the study was confined to the cognitive constructivism in teaching social sciences at the secondary level in the Telangana region.
- 3) The perceptions of teachers teaching social sciences alone were taken into consideration.

Sample of the Study

For the present study, by following the random sampling technique, a sample of 100 secondary school social science teachers and 300 secondary school students have been selected, from CBSE schools located in Telangana region (Warangal, Karimnagar, Khammam, Ranga Reddy, Nalgonda and Medak districts) of Andhra Pradesh. The selected sample includes 50 male and 50 female teachers, out of which 50 are having less than 5 years of teaching experience, remaining 50 are having above 5 years of teaching experience. Among the selected sample, 50 teachers working in the government managed schools and the remaining 50 teachers are working in the schools run by private managements. The sample includes 50 teachers working in the schools located in the rural areas, and the remaining 50 teachers are working in the urban schools.

Data Collection Procedure

The researcher personally visited (43) CBSE schools located in Telangana region (Warangal, Karimnagar, Khammam, Rangareddy, Nalgonda, Medak districts) with the research tools. After obtaining the permission of the Head of the institution the investigator introduced himself and explained the purpose of each and every questionnaire to the subjects and illustrated how the responses are to be recorded. The questionnaires were distributed to the secondary school social science teachers and secondary school students and they were asked to complete all the biographical entries in the space given. The researcher clarified the doubts of the students and teachers while filling the questionnaires. The filled-in schedules were returned and the data for each question has been quantified and tabulated in order to test the hypotheses formulated for the study.

ANALYSIS AND INTERPRETATION OF THE DATA

HYPOTHESIS-1: There is no statistically significant difference in the perception of male and female secondary school teachers with respect to classroom management in the context of constructivist approach

Table-1 – Showing the Mean, SD & t-value of Male and Female Secondary School Teachers with Respect to Classroom Management

Sl. No.	Variable	N	Mean	SD	't'-value	Level of Significance
1	Male Teachers	50	44.14	4.52	1.832	(0.05)*
2	Female Teachers	50	42.30	5.47		

* Not Significant

The calculated 't'-value being 1.832 which is less than the table value (1.960) at 0.05 level. Hence, the formulated hypothesis is accepted. Therefore, it may be concluded that there is no statistically significant difference in the perception of male and female secondary school teachers with regard to classroom management in the context of constructivist approach.

HYPOTHESIS-2: There is no statistically significant difference in the perception of male and female secondary school teachers with respect to teaching-learning activities in constructivist classroom

Table-2 – Showing the Mean, SD & t-value of Male and Female Secondary School Teachers with Respect to Teaching-Learning Activities

Sl. No.	Variable	N	Mean	SD	't'-value	Level of Significance
1	Male Teachers	50	99.30	11.66	0.29	(0.05)*
2	Female Teachers	50	99.98	11.66		

* Not Significant

The calculated 't'-value being 0.29 which is less than the table value (1.960) at 0.05 level. Hence, the formulated hypothesis is accepted.

Therefore, it may be concluded that there is no statistically significant difference in the perception of male and female secondary school teachers with respect to teaching-learning activities in the constructivist classroom.

HYPOTHESIS-3: There is no statistically significant difference in the perception of male and female secondary school teachers with respect to assessment in constructivist classroom

Table-5 – Showing the Mean, SD & t-value of Male and Female Secondary School Teachers with Respect to Assessment

<i>Sl. No.</i>	<i>Variable</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>'t'-value</i>	<i>Level of Significance</i>
1	Male Teachers	50	56.44	5.95	0.168	(0.05)*
2	Female Teachers	50	56.24	5.93		

* Not Significant

The calculated 't'-value being 0.168 which is less than the table value (1.960) at 0.05 level. Hence, the formulated hypothesis is accepted. Therefore, it may be concluded that there is no statistically significant difference in the perception of male and female secondary school teachers with respect to assessment in the constructivist classroom.

HYPOTHESIS-4: There is no statistically significant difference in the perception of secondary school senior teachers and junior teachers teaching social sciences with respect to classroom management in constructivist approach

Table-2 – Showing the Mean, SD & t-value of Senior and Junior Secondary School Teachers with Respect to Classroom Management

<i>Sl. No.</i>	<i>Variable</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>'t'-value</i>	<i>Level of Significance</i>
1	Senior Teachers	35	41.52	4.81	2.48	(0.01)**
2	Junior Teachers	65	44.09	5.02		

** Significant

The calculated 't'-value being 2.48 which is greater than the table value (1.960) at 0.05 level. Hence, the formulated hypothesis is rejected. Therefore, it may be construed that there is a statistically significant difference in the perception of senior and junior secondary school teachers teaching social sciences with respect to classroom management in constructivist approach.

HYPOTHESIS-5: There is no statistically significant difference in the perception of secondary school senior teachers and junior teachers teaching social sciences with respect to teaching-learning activities in constructivist classroom

Table-5 – Showing the Mean, SD & t-value of Senior and Junior Secondary School Teachers with Respect to Teaching-Learning Activities

<i>Sl. No.</i>	<i>Variable</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>'t'-value</i>	<i>Level of Significance</i>
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1	Senior Teachers	35	95.88	9.76	2.76	(0.01)**
2	Junior Teachers	65	101.57	9.76		

**** Significant**

The calculated ' t '-value being 2.76 which is greater than the table value (1.960) at 0.05 level. Hence, the formulated hypothesis is rejected. Therefore, it may be concluded that there is a statistically significant difference in the perception of senior and junior secondary school teachers teaching social sciences with respect to teaching-learning activities in constructivist classroom.

HYPOTHESIS-6: There is no statistically significant difference in the perception of secondary school senior teachers and junior teachers teaching social sciences with respect to assessment in the constructivist context

Table-6– Showing the Mean, SD & t -value of Senior and Junior Secondary School Teachers with Respect to Assessment

Sl. No.	Variable	N	Mean	SD	't'-value	Level of Significance
1	Senior Teachers	35	54.91	5.60	1.788	(0.05)*
2	Junior Teachers	65	57.07	5.98		

*** Not Significant**

The calculated ' t '-value being 1.788 which is less than the table value (1.960) at 0.05 level. Hence, the formulated hypothesis is accepted. Therefore, it may be concluded that there is no statistically significant difference in the perception of senior and junior secondary school teachers teaching social sciences with respect to assessment in the constructivist context.

Conclusions of the Study

- ❖ It is evident from the present study that majority of the male teachers who are following the constructivist approach in their classroom teaching are under the impression that this approach is enabling them to create a congenial and democratic environment in the classroom. They also stated that the students leave the class if required only with the permission of the teacher. This approach in teaching necessitated the seating arrangement in the class which is acceptable to all the students and the learning activities organized in the class reflect the true child-centricism in teaching-learning process.
- ❖ It is confirmed in the study that junior teachers are capable of managing the class in much better way than their senior counterparts teaching social science. Further, junior teachers are better in creating the activities which will generate motivation and interest among the students while following the constructivist approach in teaching. On the whole, the use of constructivist approach in teaching social science makes the classroom environment more lively and proved for better learning among the students.

- ❖ It is also observed that, without reference to their gender, majority of the social science teachers at secondary level preferred that the textual content should be organized spiritually rather than traditional branching way of organizing the content.
- ❖ It is evident from the study that most of the senior teachers teaching social science are serving as mentors and motivators while teaching the concepts in their classroom.
- ❖ It is also seen in the study that very few teachers are planning and presenting the contents in the class keeping in view the learners needs. Further, they are also providing resources and guidance to the students to construct the social science concepts on their own.
- ❖ It is evident in the study that majority of the male and female teachers without any gender discrimination are preferring for summative rather than continuous evaluation. Further, they are more interested in using traditional methods of evaluation rather than innovative techniques that are available. It is also observed that except few junior and few teachers working in urban schools are using tools and techniques for evaluation without any reference to the content / concepts to be evaluated. This practice is seen in all the schools without reference to the management of the school.

Recommendations of the Study

- 1) There is an imminent need to popularize constructivist approach in teaching school subjects
- 2) Teachers at all levels are to be oriented extensively in constructivism.
- 3) Textbooks and other learning materials are to be prepared keeping in view the constructivist principles.
- 4) Schools are to be equipped with the learning materials and other instructional resources required to practice constructivist approach in teaching.
- 5) In view of the need and importance of constructivist approach in teaching school subjects, proper supervisory mechanism is to be developed so as to ensure that all the teachers follow constructivist approach in their classroom teaching.
- 6) There is a need to develop new evaluation strategies to measure the achievement made possible due to the practice of constructivist approach in classroom teaching.
- 7) Massive orientation programmes are to be organized for the school teachers to understand and appreciate the baseline philosophy of constructivism and its proper application in teaching-learning process.
- 8) There is a need to conduct evaluation studies following experimental designs to see the strength of constructivism and the out coming of such studies are to be showcased and disseminated.

- 9) In view of the proven strength of constructivist approach in teaching-learning process, it should not be confined only to few selected schools. This approach should be extensively used in all the schools across the nation.

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