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RESEARCH PAPER

Effect of Constructivism-Based Teaching-Learning Strategy in English Subject of Secondary School Students

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ABSTRACT

Education is a process which empowers the body, mind and spirits of an individual. Education is the fullest realization and self-reliant of an individual not only his personal welfare rather participation, contribution and understand the world in changing society. Constructivism learning is not a process of transmission of information from teachers to students. It provides a group situation which enhances collaboration learning for negotiation of meaning, sharing of multiple views and changing the internal representation of the external reality. Teaching-learning process is a bipolar process to inculcate the new information, ideas and knowledge to the pupils. Here teaching is a process facilitated knowledge or information to learner to opt optimum adjustment in the environment. Similarly Learning is a continuous regain from experience and lifelong process. The objectives of the study are to examine to find out the effect of constructivism-based teaching-learning strategies in English subject in reference with gender and locale variation of Secondary School Students in Nadia District. The study revealed that both the rural and urban students either girls or boys having same attitude towards learning English subject. It was found that there were no any differences in girls and boys rather both had similar attitude and achievement towards constructivism-based teaching-learning strategies in English subject.

Key words: Constructivism-Based Teaching-Learning, English, Secondary School Students

INTRODUCTION

Constructivism is a theory of learning that has roots in both philosophy and psychology. The essential core of constructivism is that learners actively construct their own knowledge and meaning from their experiences. This core roots has extend back through many years by many philosophers Dewey (1938), Hegel (1807/ 1949), Kant (1781/ 1946) and vico (1725/ 1968). Philosophically this essence relies on an epistemology that stresses subjectivism and relativism the concept that while reality may exist separate from experience. It can only be known through experience resulting in a personally unique reality. Von Glasersfeld (1984, 1990) proposed three essential epistemological tenets of constructivism to which a fourth has been added in light of recent writings-

- **1.** Knowledge is not passively accumulated rather it is the result of active cognizing by an individual.
- **2.** Cognition is an adaptive process that functions to make an individual's behaviour more viable given a particular environment.
- **3.** Cognition organizes and makes sense of one's experience and not a process to render an accurate representation of reality; and
- **4.** Knowing has roots in both biological/neurological constructions, social, cultural, and language based interactions (Dewey 1916/ 1980, Garrison 1997, 1998, Gergen 1995, Maturana & Varela 1992).

Thus, constructivism acknowledges the learner's active role in the personal creation of knowledge. The importance of experience (both individual and social) in this knowledge creation process and realization that the knowledge created will vary in its degree of validity as an accurate representation of reality. These four fundamental tenets provide the foundation for basic principles of the teaching-learning knowing process as described by constructivism.

TYPES OF CONSTRUCTIVISM

Constructivism is not a unitary theoretical position rather it is a continuum. The assumptions that underlie this continuum vary along several dimensions and have resulted in the definition and support for multiple types of constructivism. Typically, this continuum is divided into three broad categories: Cognitive Constructivism, Social Constructivism and Radical Constructivism.

COGNITIVE CONSTRUCTIVISM

Cognitive constructivism represents one end or extreme of the constructivist continuum and is typically associated with information processing and its reliance on the component processes of cognition. Among the four epistemological tenets, cognitive constructivism is only emphasizes the first two tenets that is knowledge acquisition is an adaptive process and results from active cognizing by the individual learner. The cognitive constructivist perspective has proved to be quite beneficial to the understanding of learning and instruction. It remains the 'black sheep' of the constructivist community since its focus does not include the subjective nature of knowledge.

SOCIAL CONSTRUCTIVISM

Social constructivism lies somewhere between the transmission of knowable reality of the cognitive constructivists and the construction of a personal and coherent reality of the radical constructivists. Social constructivism unlike cognitive and radical constructivism and it emphasizes all four tenets. These particular epistemological emphases lead to defining principles that maintain the social nature of knowledge and belief. So knowledge is the result of social interaction and language usage.

RADICAL CONSTRUCTIVISM

Radical constructivism represents the opposite end of the constructivist continuum from cognitive constructivism. Radical constructivism fully embraces the first three epistemological tenets that knowledge acquisition is an adaptive process that results from active cognizing by the individual learner rendering an experientially based mind not the mind reflects some external reality.

OBJECTIVES OF THE STUDY

- **1.** To find out the mean differences of constructivism-based teaching-learning strategies due to gender variation
- **2.** To find out the mean differences of constructivism-based teaching-learning strategy due to locale variation

HYPOTHESES OF THE STUDY

 \mathbf{H}_{01} . There is no significant mean difference of constructivism based teaching-learning strategy in English subject of secondary school students due to gender variations.

 \mathbf{H}_{02} . There is no significant mean difference constructivism-based teaching-learning strategy in English subject of secondary school students due to locale variations.

OPERATIONAL DEFINITIONS

CONSTRUCTIVISM:

Constructivism is a process of construction of knowledge where learners actively construct their own knowledge by connecting new ideas to existing ideas on the basis of materials/activities presented to them.

TEACHING:

It is an act to impart knowledge, relevant information or to instruction something to the students where they benefits and useful in near future.

LEARNING:

It means that the learner learns/accumulates/gathers the relevant information, knowledge and experiences during study period or any learning situation.

STRATEGY:

The art of planning/procedure or technique to achieve a long-term or overall aim.

SECONDARY SCHOOL

In this context secondary school refers that students acquired school education from government schools, classes I-X under the board of WBBSSE in W.B.

STUDENTS:

One who studying or learning school education from the institute which is run by government or govt. aided under the board of WBBSSE.

DELIMITATION OF THE STUDY

- **1.** The study is delimited to the content area of constructivism teaching-learning process.
- 2. The study is delimited to Rahamatpur Panchayat, Karimpur Block of Nadia District.
- **3.** The study is delimited to 80 students from four secondary schools under WBBSSE.

SIGNIFICANCE OF THE STUDY

Constructivism works with the assumption that students come into classroom with their own experiences and a cognitive structure based on previous experiences. Three justifications have been presented in order to evaluate the effect of constructivism-based teaching strategy on the academic performance of students in English at Secondary level.

REVIEW OF RELATED LITERATURE

A large part of review of literature actually needs to be done even before the research project. It is essential part help to you are not repeating the work that someone has already done earlier. Thus, review of literature is a very important aspect of any research both for planning work as well as to show its relevance and significance.

Lord, T.R. (1997) conducted a study on comparison between Traditional and Constructivist Teaching in College. The students were assessed by the learning of identical course content in two individual group treatments, one group receiving traditional instruction (n=86) and another group receiving student centered constructivist instruction. The result found that the constructivist treated group performed better than the traditionally group on identical evaluations.

Fardanesh, H. (2006) studied on the constructivist instructional design models based on learning and teaching approaches. The objective of the study was to classify the constructivist instructional design models based on learning and teaching approaches.

The study revealed that there were very few design models with socio-cultural approach compared to models with social approach. Considering the design and development requirements of the models with socio-cultural approach there were more difficult than the other models. The social learning approach models with eight models in the column of individual learning approach are the most popular design models. This shows that the socio-cultural approach has not penetrated the literature of the instructional design at an optimal level. The models under group teaching approach seem to be suitable for all kinds of topics and subject matters.

Kim J.S. (2006) studied on the Effects of a Constructivist Teaching Approach on Student Academic Achievement Self-concept and Learning Strategies. the study examined that the effectiveness of constructivist teaching on academic achievement pre-test and post-test scores were statistically analyzed by teaching methods as the independent variable, academic achievement of the students as dependent variable. The finding of the study shown that the covariance analyses of constructivist teaching group were performed better than the traditional teaching group in academic achievement of the students.

Barman and Bhattacharya (2012) studied an Attitude of Secondary School Teachers towards Teaching through Constructivist Approach. The study found that secondary school teachers possess favourable attitude towards teaching through Constructivist Approach and do not differ significantly in their attitude towards Constructivist Teaching Approach in relation to gender.

METHODOLOGY

For the present study researcher adopted exploratory descriptive survey design has been used to complete the work.

POPULATION

All the secondary school students of Karimpur Block of the Nadia Districts of West Bengal constitute the population of the study.

SAMPLES

In the present study 5% i.e. Four secondary schools of Rahamatpur Panchayat Block of Nadia District, West Bengal have been selected by purposively. Among the selected four schools, 80 students, 40 each Boys and Girls were taken for the sample of the study by using simple random sampling method.

Table 1: Gender-wise measures of constructivism based teaching-learning strategy in English subject

Variable	Number	df	t	Remark	Hypothesis
Boys	40	77	0.45	Not significant at 0.05 level	H ₀ , accepted
Girls	40	77	0.45	Not significant at 0.05 level	H ₀₂ accepted

Testing of H₀₁:

On the perusal of the above table, it is found that the calculated value of 't' is (0.45) lower than the 't' table value at 77 df even at 0.05 level of significance. Hence the 't' is not significant. Therefore the above null hypothesis is accepted which stated that there does not exist any significant mean difference in constructivism-based teaching-learning strategy in English subject of boys and girls variation.

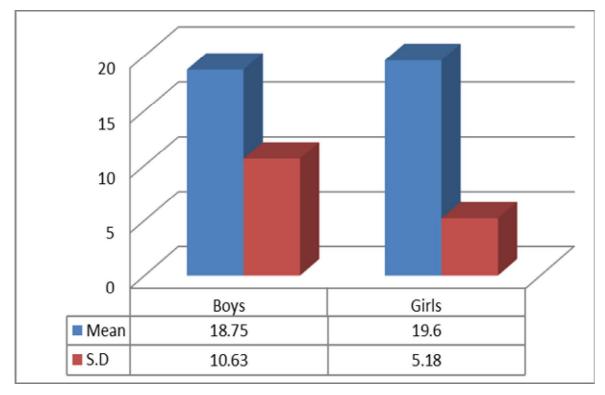


Fig. 1: Column Graph showing Mean Score and Standard Deviation of the Boys and Girls of constructivism-based teaching-learning strategy in English subject

Table 2: Measures of constructivism based teaching-learning strategy in English subject in locale variation (urban and rural)

Variable	Number	df	t	Remark	Hypothesis
Urban	40	77	0.449	Not significant at 0.05 level	H ₀ ,
Rural	40				accepted

Testing of H_{02} :

On the above table it is found that the calculated value of 't' is (0.449) lower than the 't' table value at 77 df even at 0.05 level of significance. Hence the 't' is not significant. Therefore above null hypothesis is accepted which states that there does not exist any significant mean difference constructivism-based teaching-learning strategy in English subject of urban and rural variation.

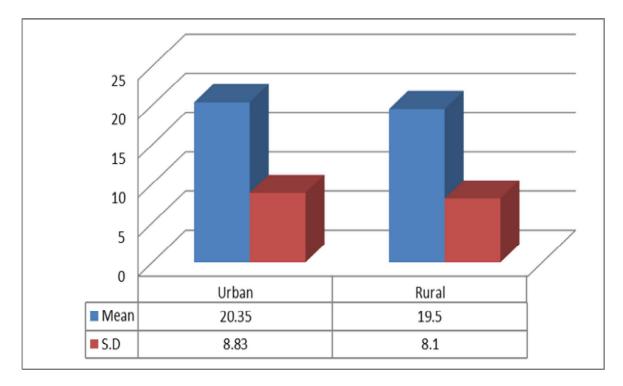


Fig. 2: Column Graph showing Mean Score of the Urban and Rural of constructivism based teaching-learning strategy in English subject.

FINDINGS

On the basis of description and interpretation of data, the investigator tried to state the findings of the study. It has been classified into two sections on the basis of set objectives and hypothesis.

 H_{01} . The result shows that the 't' ratio was not significant at 0.05 level of significant'. The 't' ratio (0.45) is less than the tabular value of 't' at 0.05 level. Thus the null hypothesis is accepted. It means that both boys and girls learning procedures of English subject are in parallel line.

 \mathbf{H}_{03} . The result shows that the 't' ratio was not significant at 0.05 level of significant'. The 't' ratio (0.449) is less than the tabular value of 't' at 0.05 level. Thus the null hypothesis is accepted. It was found that both rural and urban students learning procedures of English subject are in similar way, no any differences were found on locale variation.

CONCLUSION

Constructivist approach is a process of construction of knowledge. If the students learn through constructivist approach then they will acquire knowledge more efficiently. This will result in rapid development and improvement of education system that's why clear idea should be given to the learners about constructivist approach. To obtain knowledge in mystery level constructivism based teaching-learning process is important.

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