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Need of CT/TBCT Approach for Other than Social Science Subject: An Analysis of Final Rating of Secondary School Students

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Abstract

The main objective of this study is to analysis the rating of IX standard students with respect question I need CT/TBCT approach for other than Social Science subject to improve my Learning? It was analytical study; conducted after intervention of CT and TBCT; and two questions were used to collect the data. First question I Need CT Approach forotherthan social science subject to Improve My Learning? Was asked to CT group and Second Question I need TBCT approach for other than social science to improve my Learning?, for students of TBCT group. Sample consisted of 156 students studying in IX standard of government and private school in Bangalore, Karnataka. Collected data was analyzed using frequency and percentage analysis. The study revealed that majority of students rated strongly agree (n=38, 95.00%) followed by agree (n=2, 5%) by CT group of Government school for first question; maximum numbers of students i.e. strongly agree (n=34, 85.00%), followed by agree (n=6, 15.00 %) by TBCT group of Government school for second question. Whereas in CT group of private school more number students rated agree (n=15, 38.5%) followed by and Strongly Agree (n=11, 28.2%), undecided (n=8, 20.5), Disagree (n=4, 10.2) and Strongly Disagree (n=1, 2.6%) by students for question one; maximum number of students rated Strongly Agree (n=18, 48.5%) followed by Agree (n=17, 46.00%) and equal number students reported Undecided and Strongly Disagree (n=1, 2.7%) by TBCT group of privates school for question two. Thus, study found that students of CT and TBCT group of government and private school need same approach in other than social science subject to improve their learning.

Key Words: Constructivist Teaching, Technology Based Constructivist Teaching

Introduction

Behaviorism, cognitivism and constructivism are the main theories of learning influence on education. First theory, focus on change in behavior of students, second on enlarging cognition of the child based on prior knowledge and last focuses on knowledge construction. At present, school education emphasis more on constructivism as unique approach in initiating learner centered education. Furthermore, it creates major paradigm shift from Teaching Learning Process to Learning Teaching Process and to engage students in knowledge construction. Ornstein, Levine, Gutek and Vocke (2011) reported that constructivism is innovation process, in which child interact with their environment and build their world knowledge. They discover the inadequacy in their existing concepts and new situation and by exploring the environment they reconstruct or conceptualize their knowledge in more complete higher level knowledge". Alike, constructivism technology is another component often emphasized in education. Nowadays technology is not only used for transfer of knowledge, drill, practice, simulation etc. but also many technology tools support constructivism. Technology tools like concept-mapping, multimedia and hypermedia etc useful to carry out constructivist practices. These tools are useful to engage learner actively in many thinking skills such as manipulation of information, problem solving, own illustrations and self-learning etc (Sikdar & Bhojwani, 2010). Thus technology based, technology integrated and technology enhanced constructivist educational practices are in forefront. By keeping this in mind CT and TBCT modules were developed for selected units of IX standard social science subject and taught to find its effectiveness on academic achievement. The study was conducted in government and private school. In both the school, class was divided into two groups. First group was taught using

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Constructivist Teaching (CT) and second group by Technology Based Constructivist Teaching (TBCT). After intervention CT and TBCT post-test, rating scale and freewriting sheet etc. were administered to collect the data. Besides, I Need CT/TBCT approach for other than Social Science Subject to Improve My Learning?, was asked to rate their final opinion whether they need similar practice. In this study, the students rating on final two questions are only considered.

Statement Of Problem

An analysis rating of IX standard students with respect question I need CT/TBCT approach for other than social science subject to improve my Learning.

Key Terms

Constructivist Teaching (CT)

Constructivist Teaching refers to a process in which learning environment is created by the teacher to engage students in knowledge construction based on prior knowledge in the group, wherein peer interacts with one another with the help of the materials provided by the teacher and construct new ideas and concepts.Constructivist Teaching modules arecreated by integrating 5 E's Instructional Model, Jigsaw cooperative learning strategy, Constructivist Evaluation, ZPD and Scaffolding.

Technology Based Constructivist Teaching (TBCT)

It is refers to an approach in which the researcher integrates components of technology in constructivist teaching.TBCT modules were developed using 5 E's Instruction module, Jigsaw, technologycomponents, Constructivist Evaluation, ZPD and Scaffolding. TPACK (Technological Pedagogical Content Knowledge) approach was used to develop TBCT module.

Objectives of The Study

To study the rating Scores of IX Standard students of

- 1. CT group of government school with respect to question I Need CT approach for other than Social Science subject to Improve My Learning.
- 2. TBCT group of government school with respect to question I Need TBCT approach for other than Social Science subject to Improve My Learning.
- 3. CT group of private school with respect to question I Need CT approach for other than Social Science subject to Improve My Learning.
- 4. TBCT group of private school with respect to question I Need TBCT approach for other than Social Science subject to Improve My Learning.

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Method

The study was analytical in nature, since its objective to analysis the students rating on I Need CT/TBCT approach for Other than Social Science Subject to Improve My Learning?

Sample

The sample comprised of 156 students of standard IX from two secondary schools of Bangalore city. Among 80 students are from government school and 76 students from private school.Again, in both the school students were divided into CT group and TBCT group. In government school CT consist of 40 students and TBCT of 40 students. Whereas in private school CT and TBCT group consist of 39 and 37 students respectively.

Tool

Study used two questions i.e. I Need CT approach for other than Social Science Subject to Improve My Learning and I Need TBCT approach for other than Social Science Subject to Improve My

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Learning. The questions were five point scales with alternative Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree.

Statistical Techniques Used

Descriptive statistical technique i.e. frequency and percentage analysis were used to analysis data.

Analysi And Interpretaiton Of Data

Analysis of Rating Scores IX Standard Students of CT Group of Government School with Respect to Question - I Need CT Approach for other than Social Science Subject to Improve My Learning.

 Table 1.1: Table Showing the Responses of the students of CT Group of Government School

 with Frequency, Percentage and Yield Category

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Rating		F		%		Yield Category		F		%									
Strongly Agree		38		95.0	L	Agree		40		100									
Agree		2		5.0	Г	Category													
Undecided			0	rdis	C	inter													
Disagree		1.111				PINA													
Strongly Disagree	0																		
Total		40		100		7	0			100									

Table 1 reveals that 38 (95%) students rated strongly agree, 2 (5%) students rated Agree and no one students rated undecided, disagree and strongly disagree. Overall indication of strongly agree and agree, than adding together two agree categories yields 40 (N=100%) students. This implies that all students of CT group of government school agree that constructivist teaching approach is essential for other social science subject to improve their learning.

Analysis of Rating Scores of IX Standard Students of TBCT Group of Government School with Respect to Question - I Need TBCT Approach for other than Social Science Subject to Improve My Learning.

Rating		F		%		Yield		F		%		
		To	V			Category						
Strongly Agree		34	S	85%	0	Agree Category		40		100		
Agree		6		15%		Category			1			
Undecided		1										
Disagree	1	WW	И			0.00	/					
Strongly disagree			V	allijo	U	maii						
Total		40		100				40		100		

 Table 2: Table Showing the Responses of the students of TBCT Group of Government School

 with Frequency, Percentage and Yield Category

Table 2 reveals that, 34 (85%) students rated strongly agree and 6(15%) students rated agree. And no one student rated undecided, disagree and strongly disagree. Overall indication of strongly agree and agree, than adding together two agree categories yields 40 (100%) students. Hence the students of TBCT group of government school considered that TBCT approach is essential for other than social science subject to improve their learning.

Page No.8 Analysis of Rating Scores of IX Standards Students of CT Group of Private School with Respect to Question - I Need CT approachfor other than Social Science Subject to Improve My Learning.

Table 3: Table Showing the Responses of the students of CT Group of Private School with Frequency, Percentage and Yield Category

Rating	F		%		Yield		F		%		
					Category						
Strongly agree	11		28.2		Agree		26		66.7		
Agree	15		38.5	ŗ	Category						
Undecided	8		20.5				8		20.5		
Disagree	4		10.2		Disagree		5		12.8		
Strongly disagree	1		2.6		Category						
Total	39		100				39		100		

Table 3 reveals that, 11 (28.2) students rated Strongly Agree, 15 (38.5%) students rated Agree, 8(20.5%) rated undecided, 4 (10.2%) student rated disagree and 1 (2.2%) rated strongly disagree. Overall indication of strongly agree and agree, than adding together two agree categories yields 26 (66.7%) students. Similarly indication disagrees and strongly disagree, than adding together two disagree categories yields 5 (12.8%) students. This implies that, out of 39 students, maximum i.e. 26 (66.7%) students rated agree category and very less number of students i.e. 8 (20.5%) and 5 (12.8%) are rated undecided and disagree category. Maximum number of students' of CT group of private school opined the requirement of constructivist teaching for other than social science subject to improve their learning.

Analysis of Rating Scores of IX Standards Students of TBCT Group of Private School with Respect to Question - I Need TBCT Approach for other than Social Science Subject to Improve My Learning.

	1			0		Y	43		
Rating	F		%		Yield		F		%
					Category				
Strongly agree	18	77.	48.6	1	Agree	-	35		94.
Agree	17	27 V	2464	9-	Category	/			/ 6
Undecided	1		2.7	-			1	~	2.7
Disagree	Win				Disagree		1		2.7
Strongly disagree	UT YN	12	2.7	4	Category				
Total	37		100	CII					100

 Table 4: Table Showing the Responses of the students of TBCT Group of Private School

 Image: School students of the students of TBCT Group of Private School students of TBCT Group of Private School school

Table 4 reveals that, 18 (48.6%) of students rated strongly agree, 17 (46%) students rated Agree, 1 (2.7%) rated undecided and 1 (2.7%) rated strongly disagree. And no one student rated disagrees. Overall indication of strongly agree and agree, than adding together two agree categories yields 35 (94.6%) students. Similarly indication of strongly disagree and disagree, then adding together two disagree categories yields 1 (2.7%). Out of 37 students, highest number students i.e. 35 (94.6%) students rated agree category and very less number of students i.e. one student each rated undecided and disagree category. Hence, it indicates maximum number of students of TBCT group private school required TBCT approach in other than social science subject to improve their learning.

Findings And Discussion

The study found that majority of students rated strongly agree (n=38, 95.00%) and followed by agree (n=2, 5%) for I need CT approach for other than social science subject to improve my learning by CT group of government school; strongly agree (n=34, 85.00%) and followed by agree (n=6, 15.00%) for I need TBCT approach for learning other than social science subject for improve my learning by TBCT group of Government school. Whereas CT group of private school rated maximum students rated agree (n=15, 38.5%) followed by and Strongly Agree (n=11, 28.2%), undecided (n=8, 20.5), Disagree (n=4, 10.2%) and strongly Disagree (n=1, 2.6%) for I need CT approach for other social science subject to improving my learning by CT group of private school; Strongly Agree (n=18, 48.5%) followed by Agree (n=17, 46.00%) and equal number students reported Undecided and Strongly Disagree (n=1, 1, 1)2.7%) for I need TBCT approach for other than social science subject to improve my learning by TBCT group of private school. The findings of the present study appear to be well supported by other reviewed studies in manner that student's benefited from constructivist approach in various school subjects. The studies related to constructivist teaching shown that constructivist group performed better in quiz cores compare to traditional group in biology subject (Ramulu, 2015); constructivist approach was significantly higher in the area of developing Thinking Skills, Social Skills and learning skills among learners than the Traditional Approach as perceived by student teachers(Shetty, 2013); constructivism helps in linking previous knowledge and new knowledge and institution in constructing knowledge in English language(Puhan,Sharma and Malla, 2013); Constructivist approach made a positive effect on the achievement of students in science than the control group (Sinivas, 2013). Constructivist approach is more effective than the traditional approach in improving the mathematic creativity among eighth grade students (Pooja, 2016). Technology related constructivist teaching shown that

Conclusison

From this study it is evident that the student of CT and TBCT group of government and private school benefited by Constructivist Teaching and Technology Based Constructivist Teaching in social science subject. With this intervention impact background, the students of IX standard rated high rating for need of similar nature of practice for other than social science subjectto improve their learning. Thus, CT and TBCT approach engages students in learner centered learning environment correspondingly helps in enhancing academic achievement of students in school subjects.

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