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A STUDY OF REACTION OF STUDENTS OF CLASS V TOWARDS CONCEPT MAPPING STRATEGY

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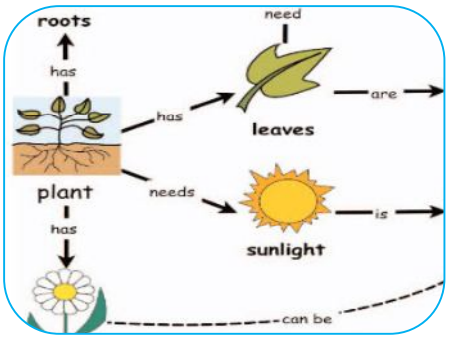
ABSTRACT:



The study was an endeavour to find out the effectiveness of Concept Mapping Strategy on Class V students in computer subject. One of the objectives of the study was to study the reaction of class V students towards concept mapping strategy of the experimental group. The Quasi Experimental design, namely Pre test – Post test Non-equivalent control Group design was employed for the study. The total sample comprised 62 School Students of Standard V studying at the Central Board of Secondary Education (CBSE) School. The two methods employed were Concept Mapping Approach of teaching computer and Traditional Method. The results of the study showed that the Concept Mapping Strategy of teaching Computer was more effective than the traditional method of teaching computer subject to class V students. Thus the detail reaction of Students towards Concept mapping strategy was procured through reaction scale prepared for students of experimental group by the researcher. The present paper discuss about the details of the reaction of students towards Concept Mapping Strategy.

KEYWORDS: *Reaction Scale, Concept Mapping, Concept Mapping Strategy.*

INTRODUCTION: CONCEPT MAPPING

Modern era is the era of technology and science. Many innovations have been introduced to improve the quality of the teaching learning process. Many innovations are emerging to teach in an innovative way. As the world is moving forward in the advancement of technology, innovations related to education are also emerging. An innovation regarding new teaching methods and new teaching concepts and use of new technology in teaching is rapidly increasing. New advancements like computer assisted instruction, program learning material are introduced to simplify and enhance the teaching learning process. One of them is concept mapping.

Concept mapping is a way of presenting a relationship between ideas, images or words. Concept mapping was developed by Joseph D. Novak and his research team at Cornell University in 1970s. In a concept map, each word or phrase connects to another, and links back to the original idea, word or phrase. Concept maps are a way to develop logical thinking and study skills by revealing connections and helping students see how individual ideas form a larger whole.

REVIEW OF LITERATURE

According to **Novak (1998)**, "Concept Maps include concepts, usually enclosed in circles or boxes of some type, and the relationships between concepts are indicated by a connecting line, linking two concepts. Words on the line referred to as linking words or linking phrases, specify the relationship between the two concepts." As per **Alpert & Grueneberg (2001)**, "Concept Map is graphical representation of a person's (student's) knowledge of a domain." **Al-Kunifed and Wandersee (1990)** in the study found that concept maps have been successfully used as learning and teaching aids as well as for the assessment and investigation of persons' knowledge structures in countless scenarios, studies and subject domains. **Kinchin, Hay & Adams (2000)** concluded that concept maps are regarded as well suited for a constructivist approach to teaching and learning. For Science education, they find that "in contrast to possible alternative graphic organizers, it is the concept mapping about which the literature has been so consistently positive" **Hubbard (2007)** proposes that a concept map may be used to support a shared understanding of a software system. The concept map was used to provide a common context throughout the software development lifecycle which would remove the problem of requiring technical views of the system to be translated to generic, ambiguous diagrams for the purposes for stakeholder communications.

OBJECTIVE

- To study the reaction of class V students towards concept mapping strategy.

DESIGN OF THE PRESENT STUDY

The present study is experimental in nature. Non-equivalent Control Group Design is applied for the present study. The layout of this design is given as under.

O X O

O O

Where, O= Pre test, X= Treatment, O= Post test

SAMPLE

The present study is experimental in nature. The study was conducted in the two schools of Indore city affiliated to CBSE. The two schools were selected using a purposive sampling technique. The schools were Vedansh International School and Ishwar Prem Vidya Mandir School. From which V class students were taken for the present study. The selected schools were assigned randomly to two levels of treatment i.e. experimental group and control group. The total sample consisted of 62 students, 30 students were in the experimental group and 32 students were in the control group. The age range of the students was between 9-10 years. The medium of instruction in both the schools was English. The schools were located in the urban areas of Indore District.

STATISTICAL TECHNIQUES USED

Statistical techniques used to analyse the reaction of students towards Concept mapping Strategy was percentage method. The data of reaction towards the Concept Mapping Strategy of students was analysed using percentage method and intensity index.

TOOLS

In the present study the researcher used tools namely: Reaction Scale for collecting required data.

Reaction Scale: The reaction towards concept mapping strategy was assessed with the help of reaction scale developed by the researcher. The scale comprise of ten statements related to different aspects of concept mapping strategy such as helpful for understanding, for use in different subjects,

easy to recall, helps in thinking new concept. The scale comprise of positive as well as negative statements. In front of each statement a five point rating scale was given. The five points were Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D), and Strongly Disagree (SD).

Instructions were given in reaction scale. Reaction scale was given to the student by the researcher after treatment. The students were asked to read each and every statement carefully and answer it by marking (✔) in front of the options available.

Table 1

Scoring procedure for the reaction scale towards concept mapping

RESPONSE CATEGORY	SCORE FOR POSITIVE STATEMENT	SCORE FOR NEGATIVE STATEMENT
Strongly Agree (SA)	5	1
Agree (A)	4	2
Undecided (U)	3	3
Disagree (D)	2	4
Strongly Disagree (SD)	1	5

ANALYSIS AND INTERPRETATION OF RESULT

Reaction of Experimental group towards Concept Mapping Strategy

The objective of the present study is "To study the reaction towards concept mapping strategy of students of the experimental group". The reaction was obtained in a reaction scale administered on an experimental group at the end of the treatment. The obtained data were analyzed with the help of Percentage. The result is given in table 2.

Table 2

Percentage wise analysis of Reaction towards Concept Mapping Strategy

S. No	STATEMENTS	SA	A	UD	D	SD	Intensity Index
1.	It takes less time to learn concepts by Concept Mapping.	14 46.66%	16 53.33%	00	00	00	4.46
2.	It does not improve true understanding of the Concept.	00	00	11 36.66%	11 36.66%	08 26.66%	3.90
3.	I like to learn all subjects through Concept Mapping.	10 33.33%	16 53.33%	04 13.33%	00	00	4.2
4.	It creates confusion in understanding concepts.	00	00	08 26.66%	15 50%	07 23.33%	3.9
5.	It takes less time to revise.	05 16.66%	23 76.66%	02 6.66%	00	00	4.1
6.	It helps in preparing notes.	16 53.33%	11 36.66%	03 10%	00	00	4.4
7.	It helps in linking the concept.	09 30%	19 63.33%	02 6.66%	00	00	4.2
8.	It is an interesting method of learning.	21 70%	06 20%	03 10%	00	00	4.6
9.	Concept maps drawn by the teacher were not easy to remember.	01 3.33%	03 10%	04 13.33%	10 33.33%	12 40%	3.9
10.	I like to use Concept Maps in other subjects also.	10 33.33%	20 66.66%	00	00	00	4.3
	Mean						4.19

From the table 2 it is clear that the mean intensity score of the experimental group is 4.19. This shows that the students have given agreeable reactions towards the concept mapping strategy. This high value of intensity index represents the positive attitude of student towards concept mapping strategy.

FINDINGS

- Students of concept mapping strategy group expressed favourable reaction towards different aspects of concept mapping strategy and concept mapping strategy on the whole.

CONCLUSION

Based on the results of the study, it is clear that concept mapping is an effective teaching strategy in teaching Computers to class V students. Reaction Scale data shows that it has positive impact on the students. This suggestion goes along the positive point of view suggesting that concept maps are very useful and they could help students improve their understanding. To conclude, based on the findings of this study it is recommended that teachers should use concept maps to enhance students' abilities in understanding of a concept. Based on the reaction of students, it is suggested by the researcher that teachers teaching in V standard should use the concept mapping strategy to teach students.

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