



Concept Mapping :: an Effective Approach of Learning

Dr. Paras Jain

Director, Silicobyte Katni Degree College, Katni, (M.P.)

ABSTRACT

The concept mapping is a graphical tool for organizing and representing knowledge. It provides an aid for better learning, wider discussions and more positive advancements. The technique of concept mapping is widely used and also proves to be effective for teaching. It involves assimilation of new concepts and propositions into existing cognitive structures. Present study includes effect of concept mapping on learning.

KEYWORDS :

Introduction:

The existing system of learning is based on rote memorization while the need of present time is meaningful learning. Concept mapping may visualize complex subject matter as science, education, business, management etc. It has subsequently been used as a tool to increase meaningful learning as well as to represent the expert knowledge of individuals and teams in education and other sectors. This technique inter connect new information, knowledge, experience or concept in a logical sequence with previous knowledge. Concept map is very useful for exploring knowledge, gathering and sharing information, structuring thoughts or collecting ideas.

Concept maps include concepts, usually enclosed in circles or boxes of some type and relationship between concepts indicated by connecting line linking two concepts. The more general concepts are usually positioned at the top and more specific concepts along with examples, images and other descriptors placed underneath. Words on the line referred to as linking words showing relationship between two concepts. The most important characteristic of concept maps is that the concepts are represented in a hierarchical manner. Concept map is very effective for exploring knowledge, gathering and sharing information, structuring thoughts or collecting ideas.

Concept maps are meaningful classroom tool for students and teachers. If student is preparing concept map, teacher can identify missing or misunderstood concepts through visual representation. When a teacher prepare concept map, it enable students to identify and explore structure and nature of knowledge. Students identify new concepts, relate them to the already known concepts and specify relationship. This technique provides more meaningful results. With the help of concept mapping team members had a better understanding and hence team becomes more productive and effective. It is useful to prepare students for their studies.

Concept making makes clear misconceptions which arise in learning process along with strengthening memory. Teachers find concept mapping as an easy to use and effective method for evaluating progress of students. Concept mapping is a valuable tool used to organize the material they want to teach their students during planning state. It facilitates the learning of material in a meaningful and structured way by organizing information. Concept mapping can be used to summarize lectures. During lecture, if students are using concept mapping instead of note taking, they can easily write all main points on a single page. Concept mapping is useful to make note in seminar or workshop. The use of concept mapping for exam can help in focusing the most important topics. Computer programmers often use concept maps to design complicated computer programmes. Organizations often use concept maps to communicate ideas to their employees. Concept mapping used to help teachers to understand subject matter and assist in focusing more on student learning.

Methodology:

Students of business administration faculty, engineering course, computer course are selected for study. 20 students of each course randomly selected. For each course, 10 students were taught same topic through general learning and 10 students through concept mapping. Observation and testing research methods were used. No. of students found that learned concepts through both methods.

Result and Analysis:

Table-1: Impact of Concept Mapping on Business Administration Learning

Class	General Learning %	Concept Mapping Learning %
BBA-1st Sem	41	63
BBA-3rd Sem	47	71
BBA-5th Sem	52	80

Table-2: Impact of Concept Mapping on Computer Subject Learning

Class	General Learning %	Concept Mapping Learning %
BCA-1st Sem	46%	68%
BCA-3rd Sem	51%	77%
BCA-5th Sem	58%	83%

Table-3: Impact of Concept Mapping on Engineering Subject Learning

Class	General Learning %	Concept Mapping Learning %
BE-1st Sem	39	71
BE-3rd Sem	45	78
BE-5th Sem	53	86

Impact of concept mapping on different subjects studied. Business administration learning related data shows that in BBA- 1st sem, 41% students learn concepts using general learning method while 63% students learn through concept mapping. In BBA-3rd sem, 71% learn with the help of concept mapping and 47% by general learning. Learning % reached up to 80 in BBA-5th sem using concept mapping and 52% by general learning.

Impact of Concept mapping on computer subject learning shows that in BCA-1st sem, only 46% students learn through general method and 68% learn through concept mapping. In BCA-3rd sem, 51% student learn using general method and 77% using concept mapping. General learning received 58% while concept mapping learning is 83% for BCA-5th sem.

Influence of concept mapping on engineering subject indicates that in BE 1st sem, 39% student learn by general method and 71% learn by concept mapping. 45% and 78% learner found using general and concept mapping method in BE 3rd sem respectively. In BE-5th sem, only 53% student learn with the help of general method and 86% learn through concept mapping.

Conclusion:

Concept mapping has been proved to help learners to learn, to create new knowledge, to understand tough subjects in easy way, to manage organizations in better way. It does not replace traditional education system; it provides assistance for better learning, wider discussion and more positive advancements. Concept mapping has been found to be important for learning based on long term memory. It is useful for problem solving, reasoning and thinking because it establishes connection between previously learned concepts and new information.

References:

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