

# USING MIND MAPS AS A TEACHING AND LEARNING TOOL TO PROMOTE STUDENT ENGAGEMENT

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## **ABSTRACT**

*Creating an environment that engages students in the learning journey is not always easy. Sometimes as faculty members we ask ourselves, "Are we taking this learning journey by ourselves?" Several years ago as I began my scholarly exploration of the utility of mind mapping as a teaching and learning tool to foster critical thinking, my colleague and I instituted a mind mapping learning activity which has helped to promote student engagement in the classroom.*

*So what is mind mapping? Mind mapping is a learning technique which uses a non-linear approach to learning that forces the learner to think and explore concepts using visual partial relationships flowing from a central theme to peripheral branches which can be inter-related. According to Buzan and Buzan, a mind map should be drawn on blank paper that is larger than standard 8 ½ by 11 inch paper. The rationale behind using a large sheet of paper is that it allows the student the opportunity to break away from the boundaries established by standard sized paper. The medium for drawing the mind map is usually colored pens or pencils. Students begin by drawing an image in the center of the paper that reflects the central theme, or topic, of the mind map which is to be created.*

*By placing this central image in the center of the paper it allows the student 360 degrees of freedom to develop their mind map. Next, the student draws main branches with key words extending from this central image. The branches represent different categories which the student perceives as being relevant to the content of the key concept of the mind map. From these main branches, sub-branches are created.*

**Keywords:** *Mind Maps, Teaching and Learning, Student Engagement*

## **A. INTRODUCTION**

Mind mapping is a technique note created by is memory expert of English, Tony Buzan. This technique is constituted by result research into that way of brain process and information of keep information is not linearly, phase for the shake of phase, but brain of keep information and process information at random. From other side that, brain of keep information in the form of picture, and non in the form of article or letter. This technique is very good for doing record-keeping,

brainstorming, and to recollect items studied. Become, if someone wish to recollect items studied. Become, if someone wish to recollect entire or all items he which have study, hence he is only require to see map of mind he which have make, and he will remember altogether. The elements of a given mind map are arranged intuitively according to the importance of the concepts, and are classified into groupings, branches, or areas, with the goal of representing semantic or other connections between portions of information. Mind maps may also aid recall of existing memories.

## **B. THEORETICAL REVIEW**

The mind map is an expression of radiant thinking and is therefore a natural function of the human mind. It is a powerful graphic texhniue which provides a universal key to unlocking the potential of the brain. (Buzan, 1993). Buzan claims that the mind map is a vastly superior note taking method because it does not lead to a "semi-hypnotic trance" state induced by other note forms. Buzan also argues that the mind map uses the full range of left and right human cortical skills, balances the brain, taps into the apocryphal 99% of your unused mental potential, as well as intuition (which he calls "super logic"). However, scholarly research suggests that such claims may actually be marketing hype based on misconceptions about the brain and the cerebral hemispheres. Critics argue that hemispheric specialization theory has been identified as pseudoscientific when applied to mind mapping.

According to Sujana (2006), mind mapping is recommended as a good technique to absorb information presented in the text they need to take the key words and connect one key word to other key words in order to connect one idea to other idea and get the main idea or the big idea of the text, get the specific information and to be able to retain the information. That's why the student's will have a good ability to rewrite what they have read and as the consequences, they had a good ability in reading text. Mind mapping is a good technique to solve the students problem in reading.

According to Buzan (1993) The mind map is an expression of radiant thinking and is therefore a natural function of the human mind. It is a powerful graphic texhniue which provides a universal key to unlocking the potential of the brain. The mainmap can be applied to every aspect of life where improved learning and clearer thinking will enhance human performance. The mind map has four essential characteristics:

Mind maps may be enhanced and enriched with color, pictures, code and dimension to add interest, beauty and individuality. These in turn aid creativity, memory and specifically the recall of information. Mind maps help you to make a distinction between your mental storage capacity, which your mind map will help you achieve. Storing data efficiently multiplies your capacity. It is like the difference between a well packed or badly packed warehouse, or a library with or without an ordering system.

Scholarly research by Farrand, Hussain, and Hennessy (2002) found that the mind map technique had a limited but significant impact on memory recall in undergraduate students (a 10% increase over baseline for a 600-word text only) as compared to preferred study methods (a -6% increase over baseline). This improvement was only robust after a week for those in the mind map group (actually it was 'spider diagrams' not Mind Maps used in this study) and there was a significant decrease in motivation compared to the subjects' preferred methods of note taking. Farrand et al. suggested that learners preferred to use other methods because using a mind map was an unfamiliar technique, and its status as a "memory enhancing" technique engendered reluctance to apply it. Nevertheless the conclusion of the study was "Mind maps provide an effective study technique when applied to written material. However before mind maps are generally adopted as a study technique, consideration has to be given towards ways of improving motivation amongst users." Pressley, VanEtten, Yokoi, Freebern, and VanMeter (1998) found that learners tended to learn far better by focusing on the content of learning material rather than worrying over any one particular form of note taking.

A mind map is often created around a single word or text, placed in the center, to which associated ideas, words and concepts are added. Mind maps have many applications in personal, family, educational, and business situations, including note taking, brainstorming (wherein ideas are inserted into the map radically around the center node, without the implicit prioritization that comes from hierarchy or sequential arrangements, and wherein grouping and organizing is reserved for later stages), summarizing, revising, and general clarifying of thoughts.

Another useful listing technique is mapping or clustering. Instead of making a linear list as illustrated above, you start by writing your topic in the center of your page in a box. And then as you brainstorm for ideas, you write your ideas around the topic. As you write one idea down, you may think of another idea

related to it, so you could write this second idea close the first idea in the cluster (a group of idea).

## **1. Characteristics**

Mind maps are, by definition, a graphical method of taking notes. The visual basis of them helps one to distinguish words or ideas, often with colors and symbols. They generally take a hierarchical or tree branch format, with ideas branching into their subsections. Mind maps allow for greater creativity when recording ideas and information, as well as allowing the note-taker to associate words with visual representations. Mind maps and concept maps are different in that mind maps focus on only one word or idea, whereas Concept maps connect multiple words or ideas.

## **2. History**

Mind maps (or similar concepts) have been used for centuries in learning, brainstorming, memory, visual thinking, and problem solving by educators, engineers, psychologists, and others. Some of the earliest examples of mind maps were developed by Porphyry of Tyros, a noted thinker of the 3rd century, as he graphically visualized the concept categories of Aristotle. Philosopher Ramon Llull (1235 - 1315) also used mind maps.

The semantic network was developed in the late 1950s as a theory to understand human learning and developed into mind maps by Allan M. Collins and M. Ross Quillian during the early 1960s. Due to his commitment and published research, and his work with learning, creativity, and graphical thinking, Collins can be considered the father of the modern mind map.

British popular psychology author Tony Buzan claims to have invented modern mind mapping. He claimed the idea was inspired by Alfred Korzybski's general semantics as popularized in science fiction novels, such as those of Robert A. Heinlein and A. E. van Vogt. Buzan argues that while 'traditional' outlines force readers to scan left to right and top to bottom, readers actually tend to scan the entire page in a non-linear fashion. Buzan also uses popular assumptions about the cerebral hemispheres in order to promote the exclusive use of mind mapping over other forms of note making.

The mind map continues to be used in various forms, and for various applications including learning and education (where it is often taught as 'Webs',

'Mind webs', or 'Webbing'), planning, and in engineering diagramming. When compared with the concept map (which was developed by learning experts in the 1970s) the structure of a mind map is a similar radial, but is simplified by having one central key word.

### **3. Uses**

One could listen to a lecture, for example, and take down notes using mind maps for the most important points or keywords. One can also use mind maps as a mnemonic technique or to sort out a complicated idea. Mind maps are also promoted as a way to collaborate in color pen creativity sessions. Mind maps can be used for:

- a. Problem Solving
- b. Outline / Framework Design
- c. Anonymous collaboration.
- d. Marriage of words and visuals.
- e. Individual expression of creativity.
- f. Condensing material into a concise and memorable format.
- g. Team building or synergy creating activity.
- h. Enhancing work morale.

Mind mapping can be drawn by hand, either as 'rough notes' during a lecture or meeting, for example, or can be more sophisticated in quality. Examples of both are illustrated. There are also a number of software packages available for producing mind maps.

### **4. Advantages of Mind Mapping Compared to Technique Note Habit**

Way of noting linear is such as those which used during the time, very graceless and drag on to our brain. Ability of brain to process information by multi sensory cannot be used maximally if we note linearly. Besides will be doing plenty activity and tire.

On the contrary, with map of mind, time note to become much more brief. Process or activity note to become more interesting and please. Needed to time study again what have been noted to become much briefer, and level of recall (recollecting) very good.

## 5. Tools

Mind mapping software can be used effectively to organize large amounts of information, combining spatial organization, dynamic hierarchical structuring and node folding. Software packages can extend the concept of mind mapping by allowing individuals to map more than thoughts & ideas with information on their computers and the internet, like spreadsheets, documents, internet sites and images.

### C. ANALYZE

Increase your students' reading speed and comprehension with mind maps. Reading that students who learn the principles of speed reading correctly become better and more satisfied readers. Mind maps enhance the learning of speed reading by encouraging students to quickly take in many words at once rather than one word at a time. The steps below explain how you can create mind maps quickly and effectively.

Making Mind mapping. How to make a map of mind:

Step 1 : Use big enough paper, size measure of A4 or of A3

Step 2 : Position Paper of horizontal (landscape)

Step 3 : PUTTING DOWN medial title of paper page

Step 4 : Of this title, make main branch to write down the gist of one's thoughts or of topic especial (deputized by just keyword)

Step 5 : Main branch have to be more be thick than additional branch

Step 6 : Use block letters, boldface, and chromatic marker.

Step 7 : Use picture, sign or symbol to progressively strengthen visual effect from each the gist of one's thoughts.

Step 8 : Of main branch, make branch again to sub of topic, and if there [is] still additional subtopic again, You can draw branch go out or sub of topic last.

Step 9 : Don't limit Your creativity. Map of mind. You might possibly will differ from map of Your friend mind, though You and Your friend note same thing. Real correct nothing that wrong and in this case. Every individual is unique and have each character.

Step 10 : More and more You exercise to make a map of mind, hence You'd be skilled progressively.

Moderately Challenging:

### **Instructions**

#### ***1. Step 1***

Start the mind map on a blank sheet of paper or blank document in a word processing computer program. Select a book or article to focus on. Place the title of the book or article within the text box in the top center of the document.

#### ***2. Step 2***

Tell students you are going to flash the mind map in front of them for a second or two before taking it away. They must read the entire title of the book or article within that brief moment.

#### ***3. Step 3***

Ask the students to write down the titles they read. Review their responses for accuracy. Continue practicing with reading titles only on the mind maps until students' perception is correct each time.

#### ***4. Step 4***

Move on to using complete sentences on the mind maps. Select one or two sentences from the same book or article. Split the sentence into two or three text boxes on the mind map. Flash the mind map in front of the students, now instructing them to read the words within each text box as if they were just one word.

#### ***5. Step 5***

Test students' comprehension of the sentences by having them explain in writing what they read. Encourage them to anticipate, also in writing, what they believe the following text they read might say.

#### ***6. Step 6***

Advance to creating mind maps with text boxes that contain entire sentences. Have students practice reading the sentences all at once, trying to assimilate the separate words into one main idea.

#### ***7. Step 7***

Complete the speed reading lessons with the most advanced mind maps. These have text boxes holding several sentences, clustered around one main idea. Encourage students to quickly read the text within each box, looking for the one main idea the text contains.

## D. CONCLUSION

In mind mapping, the whole learning can take place especially for reading activity. According to Buzan (1993) states that mind maps provide the ideal opportunity to improve your head/ eye coordination and to develop and refine your visual skills. With a little more practice, the image making skills you have already develop can be used to take your mind maps in to the realms of art. Such mind maps enable your brain to express it's own artistic and creative personality. In developing your own personal style it is especially useful to apply the guiding principles of image, color, dimension, and spacing.

Mapping can be very useful for showing important events ideas in relation to each other. In the example below, a student has drawn a map of here life. We can easily see the high points and the low points of her life from this map; also we can see which events stand out in some way for her because she has circled them. If you are telling a story or recounting an experience, mapping can help you organize the material in order. Additionally, it will help you see which events are the most important ones and thus need to be emphasized in the telling or writing. It does not matter what form your brainstorming takes-linear lists, mapping, and it does not matter what you make your notes on-a clean piece of paper, the back of an old envelope, a paper napkin, many kind of scrap paper. This is just an activity for your eyes only-to help you explore your own thoughts and feelings relating to the topic as the first step in writing about the topic.

If using of Mind Mapping every day, we will find life become more productive, gratifying, and successful in each area.

- 1 We can reach what wishing us reach.
- 2 We can become one who is the full of idea.
- 3 We can become more efficient and is productive.
- 4 We can realize our dream

Like map of street, Mind Map will assist to bring you of your place in this time to place which you wish. Such as those which we have seen alongside this book, Mind Map very effective because mind mapping work together brain and way of natural activity of him: Mind Mapping is materialization of physical of Mind Map mind in dramatic and remarkable activity network in your head. In shorter, mind mapping work together to feel brain puckish with association and imagination. This is because mind mapping is same activity - and adventure - among what is going on in brain and what you paper pour.

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