EXPLORING THE WORLD OF MIND MAPS

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INS & OUTS OF MIND MAPS

The mind mapping technique, and the term, mind map, originated with Tony Buzan in the 1960's, a popular psychology author, as a way of helping people to learn more effectively. His work is partly based on the brain research of the 50's as well as left/right brain work by Robert Ornstein and Roger Wolcott Sperry. Research indicated that the brain responds best to key words, images, colors, and direct association. Buzan refined these ideas into a simple set of rules that can be followed to create mind maps. Many individuals have found mind maps to be an efficient way to take notes, plan a project, prepare for a presentation and for brainstorming. Mind mapping has also been shown as an effective tool for memorizing facts and information [3]. Mind maps are used in business, and increasingly in education [1], [2].

Mind mapping is a visual tool used to organize and relate themes or objectives. A mind map consists of a central topic or problem shown as a node with sub-topics represented by branches radiating out from the central node. Buzan suggested that hand-drawn mind maps that incorporated pictures and different colors would bring concepts to life. A good mind map shows the overall structure of the topic or problem and relates subtopics through color, lines and pictures. The following mind map (Figure 1, Mind Map Guidelines) gives you an idea about techniques used in producing a mind map (http://en.wikipedia.org/wiki/Mind_map).
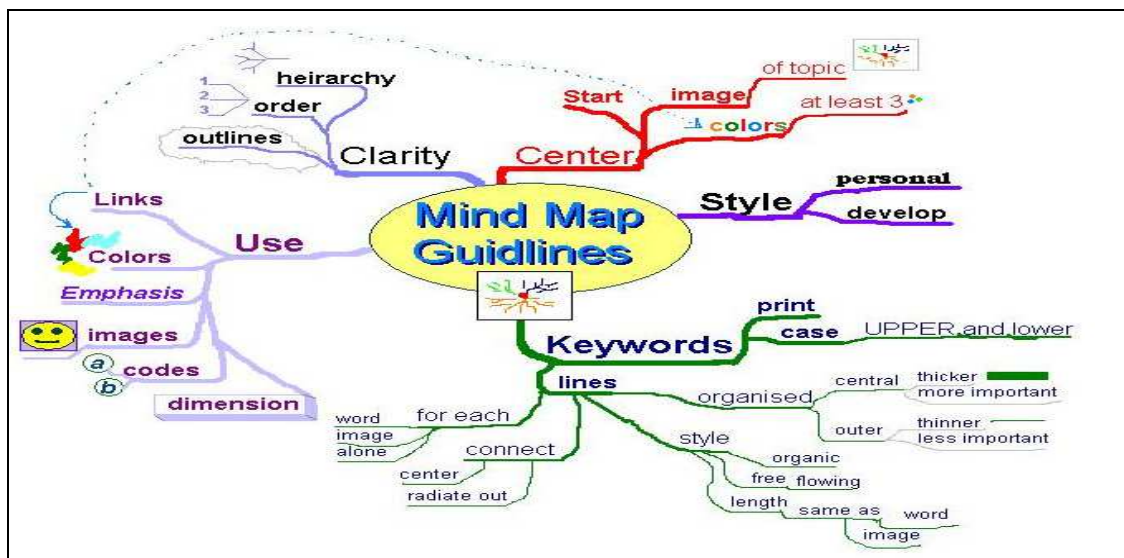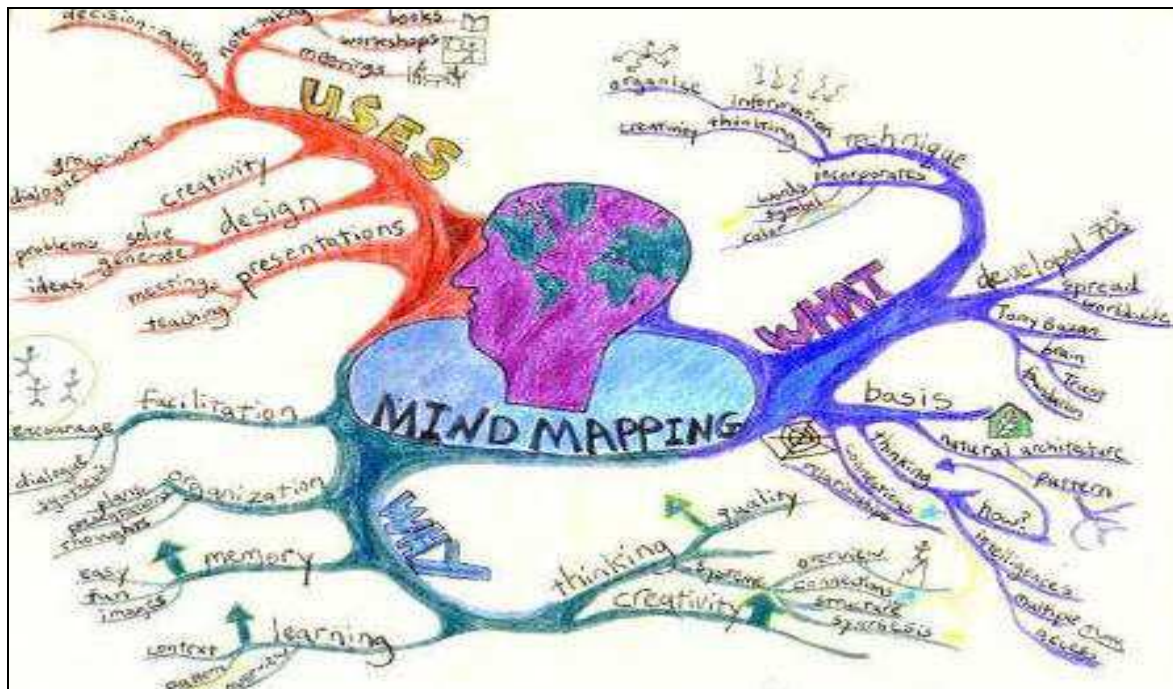
Figure 1: Mind Map Guidelines

Figure 2 illustrates a hand-drawn mind map using mind mapping techniques of color, nodes and branches (http://www.12manage.com/%5Cmethods_mind_mapping.html)

Figure 2: Hand-drawn Map

Unlike linear thinking modes, mind mapping is a graphic technique to capture thoughts, ideas or information. Rather than writing notes down in a linear manner as in making an outline, an individual creates a visual "map." Linear thinking modes such as outlines lack the flexibility, creativity and ability to show associations between concepts. Figure 3 offers an example of an outline based on the mind map shown in figure 2.

Figure 3: Outline - Mind Mapping

1. What is mind mapping?
        A. Developed in 70's
        B. Technique
        C. Basis
II. Uses of mind mapping?
        A. Note taking
        B. Decision making
        C. Presentation
        D. Creativity
        E. Design
III. Why is mind mapping used?
        A. Memory
        B. Learning
        C. Organization
        D. Facilitation
        E. Thinking
        F. Creativity

You can see from the mind map the overall organization of the topic and the use of color, lines and pictures. Mind maps enable people to see the various aspects of the topic or problem and seeing all constituents simultaneously positively affects concepts learning [6], [7]. Mind mapping enthusiasts affirm that mind mapping is an extremely valuable technique to use for educational, business and personal purposes. The increasing popularity of mind mapping is evidenced by the number of blogs, books and articles that focus on mind mapping. If you google "mind mapping", then you will receive over 2,200,000 hits. If you google "mind maps," then you will receive over 9,300,000 hits. Many individuals have embraced mind mapping techniques and hand-drawn maps. Mind mapping software became a natural next step in the evolution of creating mind maps.

MIND MAPPING SOFTWARE

During the 1990's, companies began developing software versions of the hand-drawn maps. A recent research study by InnovationTools.com of 500 executives reported that 73% of the respondents used mind mapping software with preparing for presentations and note taking being the most popular applications. Improved clarity of thinking and managing information overload were cited as the two biggest benefits from using mind mapping software [5]. Popular software packages include MindManager, FreeMind, NovaMind, Cayra, MindMeister, bubbl.us and Tinderbox.

Use of mind mapping software does offer advantages and disadvantages over hand-drawn mind maps. The advantages and disadvantages are listed in Table 1.

Table 1: Hand-drawn Maps and Computer-drawn Maps - Advantages and Disadvantages

	Advantages	Disadvantages	
Hand-drawn Mind Maps	A. The price is right B. No restrictions on map design and layout C. May create map anytime with pencil and paper D. Each map is a unique creation of the user E. Collaboration possible if colleagues are together in same place	A. Can not be digitally stored other than as a scanned document B. Map size is limited C. Preference of user for mind mapping software advantages	
Mind Mapping Software	A. Ability to link to other information such as hyperlinks and notes B. Ability to modify and filter map easily	A. High cost of none free- source software B. Requires computer access C. Learning curve of using software	

	C. Ability to integrate into other software D. Ability to create templates easily E. Ability to allow real-time collaboration F. No size limits	D. Map design flexibility restricted by software options E. Preference of user to hand-draw map F. Map sharing restricted by format incompatibility	

MindManager, the mind mapping software market leader, has sold approximately one million licenses worldwide. Compared to the number of potential users, this is a small number. Using mind mapping software is not yet a widespread way to present information [5]. However, the number of software users may be on the rise in the near future because of product packaging and increased software capability. Beginning in 2007, Microsoft Office Professional package includes MindManager software thus increasing the likelihood more individuals will decide to use the software.

Additionally, the collaborative mind mapping vendor, MindMeister, has been selected as the 2008 Red Herring 100 Europe award winner. The award is annually granted to the top 100 private technology companies identifying new and innovative technology companies based in the Europe, Middle East and Africa region. MindMeister is a web based application that enables users to create, manage and share mind maps online and access them anytime, from anywhere. MindMeister allows friends and colleagues to work on their maps simultaneously using a standard web browser. This has been seen as a crucial difference to desktop-based mind mapping software and one of the key advantages of mind mapping software over hand-drawn maps.

Another software package, FreeMind, has also increased its capabilities considerably. The current version of FreeMind has become an application that is capable and flexible and can hold its own against many commercial competitors in the mind mapping software arena [4]. FreeMind is an open-source mind mapping software, however, it does not have all the features such as sharing and collaborative features software such as MindMeister has.

A factor affecting the significance of some of the advantages of mind mapping software over hand-drawn maps is the purpose for creating the mind map. Mind maps may be created for personal use such as taking notes at a lecture. If collaboration is not required and the map is for solitary use, then mind mapping software advantages such as sharing and collaboration are not necessary. Alternatively, mind maps may be created by teams or in situations where there is interaction and communication between parties in building and updating a mind map. For example, creating mind maps of business processes within the supply chain requires interaction and communication between businesses. Clearly in this situation, the ability of software to allow sharing and editing of mind maps become more relevant. In these situations, having real-time collaboration may make it worth the expense of using mind mapping software, and thus make it much more compelling choice over hand-drawn maps to business users in the future.

CONCLUSION

Whether created manually or through the use of software, mind mapping offers an alternative to the linear presentation formats and provides a creative format that may be useful to

in brainstorming, organizing and problem solving. Its flexibility makes it suitable for education, business or personal settings and for any subject or theme.

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