INTRODUCTION

A Mind Map is a diagram used to represent words, ideas, tasks, or other items linked to and arranged around a central keyword or idea. Mind Mapping is a graphical way to represent ideas and concepts. In a Mind Map, information is structured in a way that resembles closely how the brain actually works.

Mind Maps can be created on paper, on a blackboard or whiteboard or with a computer (digital). A digital Mind Map can be developed by using productivity software, such as MS PowerPoint or MS Word, or with more advanced and specialized Mind Map software solutions. **Concept Mapping** is a similar idea, but focuses on connections between concepts in different, diverse patterns, while Mind Maps are based on radial hierarchies denoting relationships around a central governing concept. In this toolkit, both ideas are used interchangeably.

Mind Mapping as an instructional design is a powerful concept in education as it brings a new, non-linear perspective on the construction of ideas, knowledge and insight and as such innovates and transforms interaction between teachers and learners.

TEACHING AND LEARNING

Education Purposes

In education, Mind Maps can be used to:

* **Brainstorm:** Learners can develop ideas on a given topic and list all ideas related to the topic.
* **Categorize ideas:** After listing all ideas, learners can try to find relations between them and categorize them in order to make the Mind Map systematic and easy to analyze.
* **Identify problems and solutions:** In some cases, Mind Maps help to identify problems for learners and to find out appropriate solutions.
* **Record and present ideas:** Learners can use Mind Maps to record their ideas, to take note and to visually present their ideas to an audience.

In classroom teaching

Mind Maps can be used at different times during a lesson for different purposes:

* **To introduce the new lesson**: The teacher can give learners a topic and ask them to list ideas around that topic.
* **For learners to attain new knowledge:** The teacher can ask learners to develop a

Mind Map to review and summarize key issues which they have just learnt, which helps them to consolidate the lesson. The teacher can also combine a Mind Map and questions on the topic, which helps learners to understand better and to master knowledge systematically.

* **To review and evaluate learning outcomes:** The teacher can ask learners to draw Mind Maps on a learning topic, through which she/he can assess their level of mastery.

Subject Examples

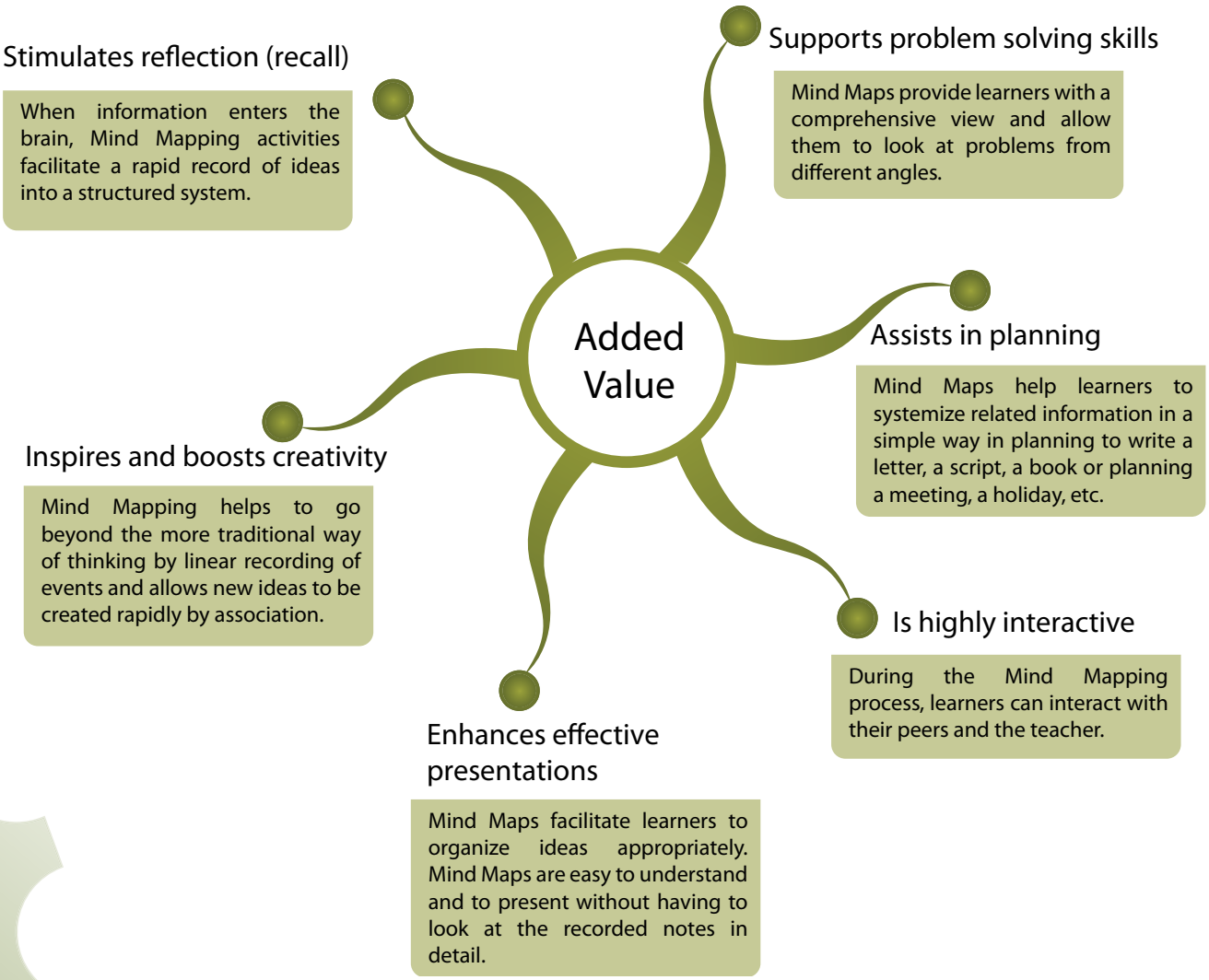
Some inspiration for use of Mind Maps in different subjects:

* Chemistry: To brainstorm about chemical features of agents.
* Technology: To systemize overall knowledge on breed, food and living habitat.
* Pedagogy: To systemize teaching methodologies at pre-schools.
* Biology: To present plants' growth processes, the nutrition pyramid (designing daily meals according to nutrition pyramid), relations in animals' population and community, and the structure of organs.
* History: To identify historical stages of a country and give related information in each stage.
* Literature: To summarize a story (roles, situation, climax, action, etc.).
* Foreign languages (English): To identify negative adjectives and categorize them according to prefixes (ir-, un-, in-, im-, dis).

Added value

Using Mind Maps in teaching and learning helps transforming "chalk and talk" teaching into more constructivist approaches to develop insight and knowledge. Mind Maps are ideally developed in a step by step process where teachers and learners interact with each other. Since it is an activity that is both analytical and artistic, it engages the brain in a rich way, helping in all its cognitive functions. Mind Maps can be used in many different contexts, it is simple and fun.

Mind Mapping …



Mind Mapping can support Shared Writing activities, as they can inspire and assist in planning. For the same reasons they can be used to design a scenario for a Photo Story. Mind Maps can easily be integrated in Presentations.