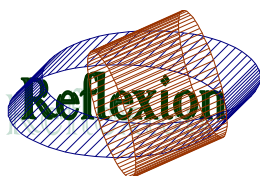


## ***Contents: Methods of visual learning***

<b>Visual Start</b>	This method is the practical application of a picture database in the starting phase of the workshop about visual learning.
<b>Brainstorming</b>	This method produces ideas without assessing them. There is no critique allowed.
<b>Brain writing</b>	Brain writing is the written form of brainstorming.
<b>Clustering</b>	Clustering is a non-linear activity that generates and nets ideas, images and feelings around a stimulus word. Clustering may be a group or an individual activity.
<b>Mind mapping</b>	A mind map is a diagram which is used to represent tasks, words, ideas or other items linked to and radiating from a central key word or topic. The structure of a Mind Map is similar to a human neuron or a tree.
<b>Cognitive maps</b>	Cognitive maps illustrate a problem or a task by means of a map and thus help to generate a solution. Certain fields – similar to the shape of a country – may represent topics or requirements. It is up to the learners to define the importance of fields by giving them largeness and allocation in the map and connect them by streets or paths.
<b>Morphological box</b>	The Morphological Box is a morphologic-analytical creativity technique developed by the Swiss astrophysician Fritz Zwicky (1898-1974). Through the clear combination of possibilities or properties, new ideas are generated.
<b>Memory Hooks</b>	This is a method of mnemotechniques for better remembering by creating an association. The learner fixes “memory hooks”.
<b>Storytelling</b>	This method may encourage learners to explore their expressiveness. They create their own stories by using given words or departing from pictures.
<b>Collages</b>	This method suits to workshops with beginners or with migrant persons. The collage allows showing the culture of the learner’s country of origin.

The pictures on the following pages and more images for these methods are provided by the gallery of the project website under [www.die-bonn.de/visual/english/](http://www.die-bonn.de/visual/english/)



## ***Methods of visual learning***

### **Visual Start**

This method is the practical application of a picture database in the starting phase of the workshop about visual learning.



<i>Phase</i>	<i>Action</i>	<i>Equipment</i>
Preparation	The trainer prepares a picture database: photos, pictograms, graphics, paintings and lays them out on a table. To provide a sufficient variety it is recommended to have about 3 pictures per learner.	Picture database
Introduction	The learners are asked to present themselves with the information like experiences with visual learning, working field, target groups, expectations to the workshop.	
Explaining of the method	The trainer asks the learners to go to the table and choose each on picture which evokes positive associations and one with a negative impact.	
Working with the method	The participants choose their pictures and return to their places. Then they present themselves to the group and give the above requested personal information and explain their choice of pictures.	
Results	The method demonstrates that pictures are interpreted in a subjective way determined by the biographical and social background of the person.	

Effects of the method:

- The given spectrum of practical fields and personal preferences of the participants will be made clear right at the beginning of the workshop.
- The method encourages discussions later on and an exchange of experiences.

## ***Methods of visual learning***

### **Brainstorming**

This method produces ideas without assessing them. There is no critique allowed.

<i>Phase</i>	<i>Action</i>	<i>Equipment</i>
Introduction	The trainer announces this method to start with a new subject and explains the topic.	Cards, pen, pin board
Explaining of the method	The trainer asks the learners to tell every idea or association which is evoked by the topic. Important part of the method is not to criticise the ideas.	
Working with the method	The learners tell their ideas and the trainer writes them down on a cards.	
Results	The trainer fixes the cards to a pin board. The learners or the trainer combine the ideas and arrange them under headlines.	

Effects of the method:

- A huge variety of ideas comes up and can be used for the next learning steps.

## ***Methods of visual learning***

### **Brain writing**

Brain writing is the written form of brainstorming.

<i>Phase</i>	<i>Action</i>	<i>Equipment</i>
Preparation	The trainer writes the topic on several flipchart sheets.	Flipchart sheets, pens
Introduction	The trainer announces this method to start with a new subject and explains the topic.	
Explaining of the method	The trainer asks the groups of learners to divide into subgroups and to write on the flipcharts sheets their ideas or associations connected with the topic. Critique of ideas is not allowed.	
Working with the method	The learners write down what comes to their minds under the topic.	
Results	The sheets are shown and discussed in the class.	

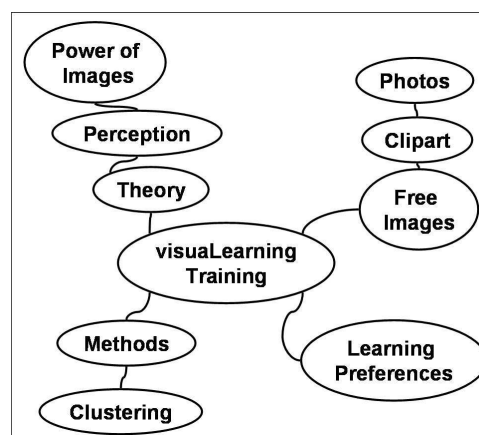
Effects of the method:

- The learners inspire each other by their contributions.
- Ideas of others can be picked up and used for own inputs.

## Methods of visual learning

### Clustering

Clustering is a non-linear activity that generates and nets ideas, images and feelings around a stimulus word. Clustering may be a group or an individual activity.



Phase	Action	Equipment
Introduction	The trainer announces this method to explore a topic or a task. Clustering allows all personal ideas, images, events and experiences.	Sheets of paper for individual work and flipcharts for groups, pens
Explaining of the method	The trainer demonstrates the method: 1 <sup>st</sup> step: A key word is written in the middle of a paper or a flipchart sheet and being circled. 2 <sup>nd</sup> step: Starting with free associations all words will be noted in the order in which they occur. They are circled as well. It is useful to write quickly and without reflecting. 3 <sup>rd</sup> step: The added words are grouped around the centre and connected by lines. 4 <sup>th</sup> step: In case that a new key word comes up this is the centre of a new chain of thoughts which grows from the centre to the outside.	
Working with the method	The learners choose or get a new topic or task and create their clustering image around the key word.	
Results	The learners present their solutions, compare them and discuss the ideas.	

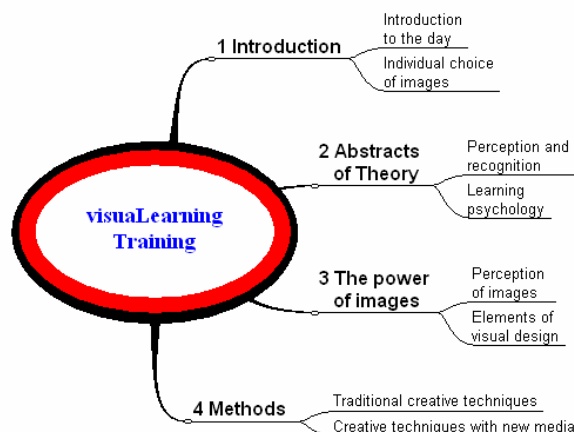
Effects of the method:

- Clustering allows you to explore many ideas as soon as they occur to you.
- The free flow of ideas opens a subjective point of view and develops the intrinsic motivation.

## Methods of visual learning

### Mind mapping

A mind map is a diagram which is used to represent tasks, words, ideas or other items linked to and radiating from a central key word or topic. The structure of a Mind Map is similar to a human neuron or a tree. The method is similar to brainstorming and clustering. In opposite to those methods in mind mapping there is no free association.



Phase	Action	Equipment
Introduction	The trainer presents a method to visualize the aspects of a topic, e. g. visual learning.	Posters for the groups, pens
Explaining of the method	Mind mapping starts by writing down the central idea in the middle of a poster. Related und new ideas are radiated out from the centre by branches and twigs like a tree. The hierarchical structure is visualized by thick main lines and thin sidelines. Ideas in different branches may be connected by arrows. Colours underline the structure of the mind map.	
Working with the method	The learners divide into groups of 3 to 5 persons and create a mind map. A visual net of relations will appear.	
Results	The groups present their maps and compare the solutions concerning the idea and the connected items as well as the different structures of the mind maps.	

Effects of the method:

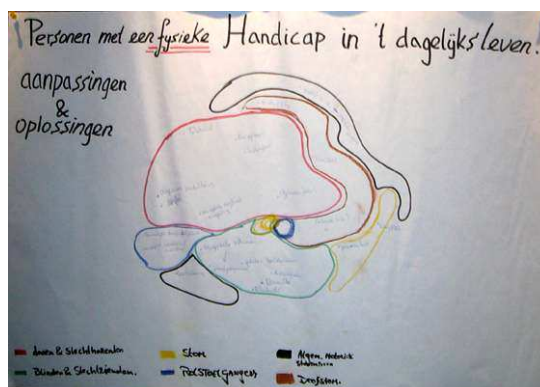
- With Mind Maps it is possible to visualize, generate, structure and classify ideas very fast.
- Mind maps help to think because the structure allows recognizing coherences.
- The method can be an aid in different situations, e.g. study, organization, problem solving, and decision making.



## Methods of visual learning

### Cognitive Maps

Cognitive maps illustrate a problem or a task by means of a map and thus help to generate a solution. Certain fields – similar to the shape of a country – may represent topics or requirements. It is up to the learners to define the importance of fields by giving them largeness and allocation in the map and connect them with streets or paths.



Phase	Action	Equipment
Introduction	The trainer gives a task or a problem and asks the learners to draw a map.	Sheets of flipchart, coloured pencils
Explaining of the method	The shape of the map is free. The learners define the importance of fields by size and location. They may draw streets and paths to connect the fields.	
Working with the method	The trainer may support the process by questions like What is important for the task? Which points are connected? Where are similarities or differences?	
Results	The learners explain the map and their way of constructing it.	

Effects of the method:

- Cognitive maps help to visualize complex problems and tasks.

## Methods of visual learning

### Morphological Box

The Morphological Box is a morphologic-analytical creativity technique developed by the Swiss astrophysicist Fritz Zwicky (1898-1974). Through the clear combination of possibilities or properties, new ideas are generated.

#### Problem: Creation of a new table

<b>Number of legs</b>	0	1	3	4	5	100
<b>Material</b>	Wood	Glass	Plastic	Cork	Cloth	
<b>Height in cm</b>	0	20	50	70	100	200
<b>Form</b>	round	square	rect- angular			

**Idea: no legs, glass, 100 cm, round**  
**The table hovers – may be hanging from the ceiling.**

Source: Wikipedia

<i>Phase</i>	<i>Action</i>	<i>Equipment</i>
Introduction	The trainer introduces this method as a way to generate infinite possibilities of creative variation.	Sheets of paper or flipchart with tables to fill in the properties
Explaining of and working with the method	The trainer draws a table of about 6 columns and 4 lines on a flipchart, then notes step after step of the method and asks the learners to suggest properties for the creation of a new table. 1 <sup>st</sup> step: Define the properties of a problem (table). 2 <sup>nd</sup> step: Register all possible forms of the properties. 3 <sup>rd</sup> step: Develop ideas by combination of the properties.	
Results	The solution may be a table hanging from the ceiling.	
Transfer	The learners work in groups and compose fairy tale by using the morphological box.	

Effects of the method:

- The morphological box demands the creativity and motivates the students.
- This approach generates a complete process of a topic.



## ***Methods of visual learning***

### **Memory Hooks**

This is a method of mnemotechniques for better remembering by creating an association. The learner fixes “memory hooks”.

<i>Phase</i>	<i>Action</i>	<i>Equipment</i>
Introduction	The trainer asks the learners what they would like to remember or gives them facts which they need to remember.	paper colour markers flipchart
Explaining of the method	The trainer gives a visual example for the date 1982: the shape of the 8 may be found in the picture of a snowman. This is a “memory hook”	
Working with the method	The learners create their ideas to find the shape of the 8 and draw their own “memory hook”	
Results	The drawings will be shown and explained by the learners.	
Transfer	Learners find their own dates, numbers, quantities, which they need remember regularly. They develop their memory hooks and present them in the classroom.	

Effects of the method:

- Participants were motivated and willing to create their own ideas.
- Many different examples of associations
- A lot of fun
- Encouragement and interaction

## ***Methods of visual learning***

### **Storytelling**

This method may encourage learners to explore their expressiveness. They create their own stories by using given words or departing from pictures. Important remark: there are no stupid stories.

<i>Phase</i>	<i>Action</i>	<i>Equipment</i>
Introduction	The trainer asks the learners to part into groups of 3 to 4 persons in the corners of the room.	Paper list or 7 cards with words or pictures for each of the 4 groups, new list or cards for the transfer exercise
Explaining of the method	The trainer explains the task: to tell a story in which the required words/pictures are central. There are no stupid stories! One person may start to tell and then ask the next person to continue. The trainer gives each group up to 7 cards with the words to learn or with pictures to use.	
Working with the method	The learners tell their stories.	
Results	The groups come together and report the main ideas of their stories.	
Transfer	Change of groups and cards. Then new stories are told.	

Effects of the method:

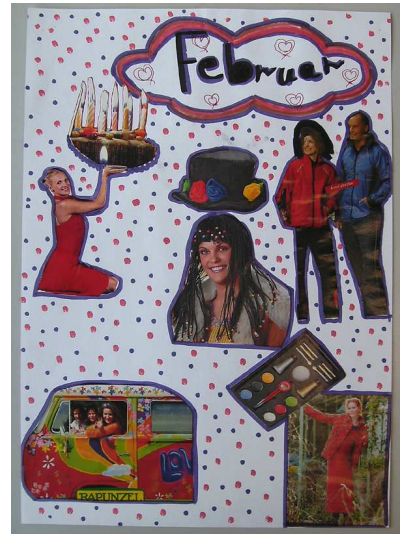
- It helps to improve imagination and expressiveness.
- Learners train to listen and to report the stories.
- The method is especially useful when words or events not connected to each other have to be remembered.
- Variety of different and funny stories.

## **Methods of visual learning**

### **Creation of a collage**

This method suits to workshops with beginners or with migrant persons. The collage allows showing the culture of the learner's country of origin.

For example a calendar may show the seasons with native customs of the learners.



<i>Phase</i>	<i>Action</i>	<i>Equipment</i>
Preparation	The trainer lays out all the materials on a large table.	Poster sheets, coloured pencils, images, photos, newspapers, journals, scissors and glue
Introduction	The learners are asked to make a collage for each month.	
Explaining of the method	The materials may freely be used. Each month will get one sheet.	
Working with the method	The learners work with the materials in groups of the same origin.	
Results	The calendars are shown and the typical customs are explained.	

Effects of the method:

- The method is very good to communicate about European culture.
- Collage has an integrative impact on divergent groups.