

VISUAL THINKING LAB



This document is a brief description of the Visual Thinking Lab presentation.



<http://www.diceproject.eu>

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INTRODUCTION

This document contains the instructions for conducting a Visual Thinking Lab workshop. All explanations and instructions correspond to the pdf file VISUAL THINKING LAB.pdf

In this file you will find screenshots of each slide of the presentation together with instructions and additional information you need to communicate to the participants. For some of the topics you will have to present hand-written posters and cards.

The presentation is divided in three parts.

Part 1: An introduction. You need to present to your participants **in the beginning** of their VT training - its goal is to give a **tangible, specific definition to VT**, address the common **fear** of not being able to draw and explain **why VT** is an important technique to use.

Part 2: After you have completed this initial part, you go into sketching. We encourage you to draw your own sketches following our guidelines. We believe that everyone can draw and you are here to prove it! We believe in you!

Part 3: Introduction of some visual thinking tools and their applications.

MATERIALS:

Here is a list of all materials you will need for the workshop.

Flipcharts (2 for you and 1 per group of 3-4 people).

Markers (1 black per person and a box of colourful markers per group. It would be nice if you have different makers with different thickness).

A3 paper.

A4 paper – you need a lot of it.

A5 paper –thick.

Post-its – different colours and sizes.

Tape to hang all materials on the walls.

SLIDE 3



Goal: Prepare participants to understand what VT consists of.

You will need:

1. Blank flipchart sheet.
2. Slide x on screen.

HOW TO PRESENT:

1. Put the slide (#3) on the screen and **ask the trainees for their thoughts** on what VT means to them.
2. **Write down keywords** from their answers and ask them to elaborate - no one-word answers - try to have also a discussion.

Tips:

- Try to write down the keywords as a **concept map** (you will see what it is in the tool section), rather than a list
- Be familiar with Dan Roam's definition (you can find it in slide 5) and read the intro chapter to his book "The Back of the Napkin (Expanded Edition): Solving Problems and Selling Ideas with Pictures":

SLIDE 4



Goal: Build on top of initial ideas with more information.

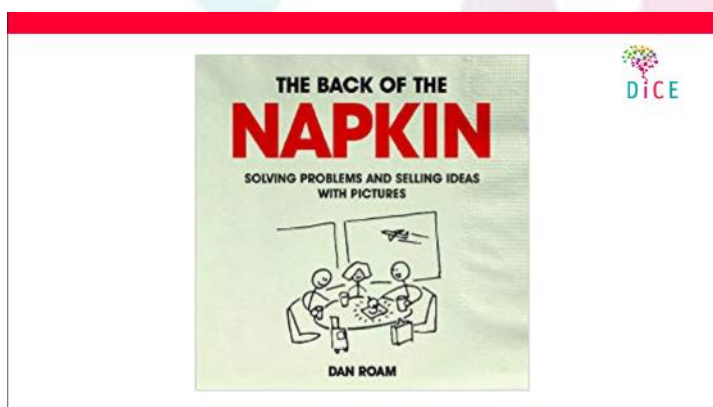
You will need:

1. Same flipchart from last step.
2. Slide 4 on screen.
3. Play video on the slide.

HOW TO PRESENT:

1. **Play video** "Are you a visual thinker?" - click on movie icon
2. Ask participants: "Now that we watched the video, is there something that we missed before?"
3. **Add information and write it down** on the same flipchart sheet you used before

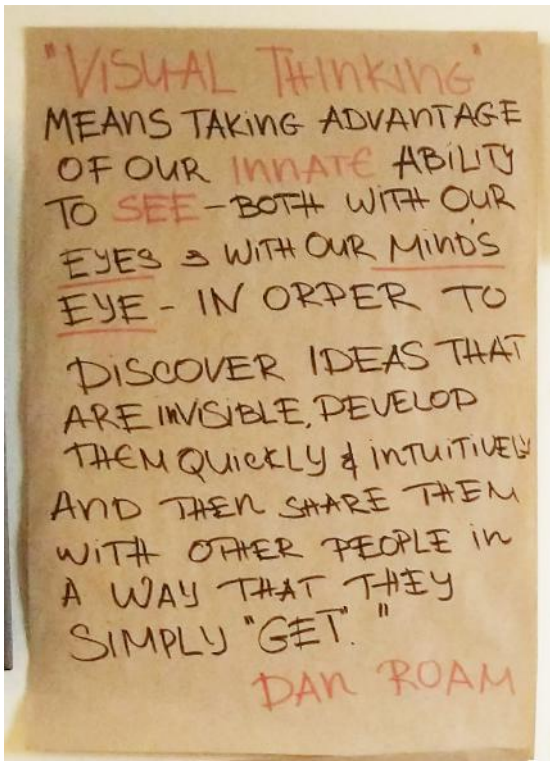
SLIDE 5 (STEP 1)



Goal: Have a tangible definition to work with.

You will need:

1. Poster with Dan Roam's definition of VT, keep it hidden (prepare in advance)



Dan Roam's VT Definition: "Visual thinking means taking advantage of **our innate ability to see** - both with our eyes and with our mind's eye - in order to **discover ideas** that are otherwise invisible, **develop those ideas** quickly and intuitively, and then **share those ideas** with other people in a way that they simply "get"." Dan Roam

HOW TO PRESENT:

1. **Show poster** with Dan Roam's definition of VT and read it aloud.
2. Ask participants if they **agree** with the definition and note that it puts an order to all the ideas they have already mentioned before.

Tips:

- Always keep the definition poster at a prominent place, throughout the training, so that people come back to it.

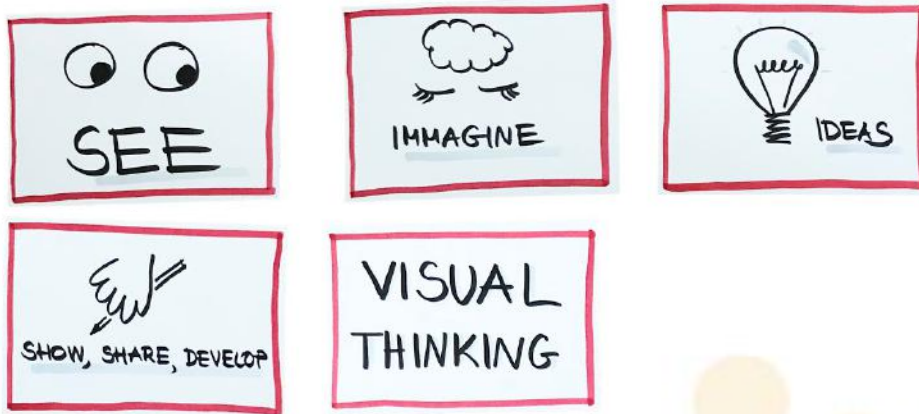
SLIDE 5 (STEP 2) – TRANSLATE VT DEFINITION TO VISUALS

As you still have slide 5 on screen move to a blank flipchart!

Goal: Model how text is translated into visuals.

You will need:

1. The poster with the definition.
2. Blank flipchart sheet.
3. Five stickers (prepare in advance). Use thick A5 paper and markers. Keep them hidden.

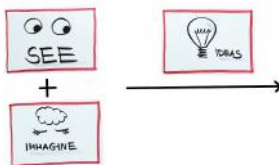


HOW TO PRESENT:

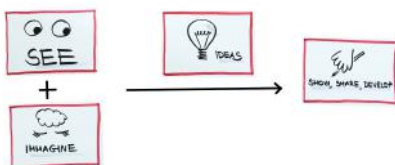
1. Put another **blank flip chart** sheet next to the definition poster.
2. “Now, since we are going to be all visual here, let’s **translate** the definition into visuals.”
3. Put first the “**see**” and “**imagine**” stickers. “These are internal and available to all human beings”.



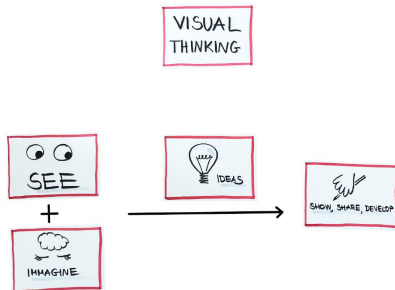
4. Draw the arrow and put the “**ideas**” sticker on top of it. “We use these to discover ideas.”



5. Put the “**Show, share and develop**” sticker. “This is the last part where we externalise the ideas through drawing.”



6. Put the “**Visual Thinking**” sticker on top of the whole process. “Ta-da! This is what VT is all about - easy!”



Tips:

- Put stickers one by one, (this is called “progressive disclosure”).
- Always keep the definition poster and stickers at a prominent place, throughout the training, so that people come back to it.
- Stress that it is not rocket science, nothing complicated- it is plain and simple.

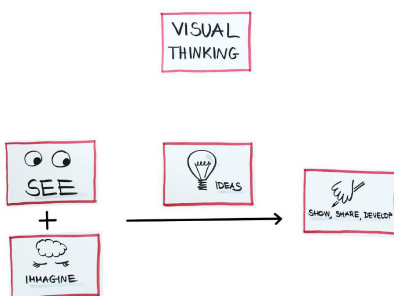
SLIDE 5 (STEP 3) – THE VISUAL PROOF

HOW TO PRESENT:

Goal: Prove we are first and foremost visual beings; written words come second – especially important for highly analytical people, who consider their brain only works with numbers and letters.

You will need:

1. Poster with visual definition



HOW TO PRESENT:

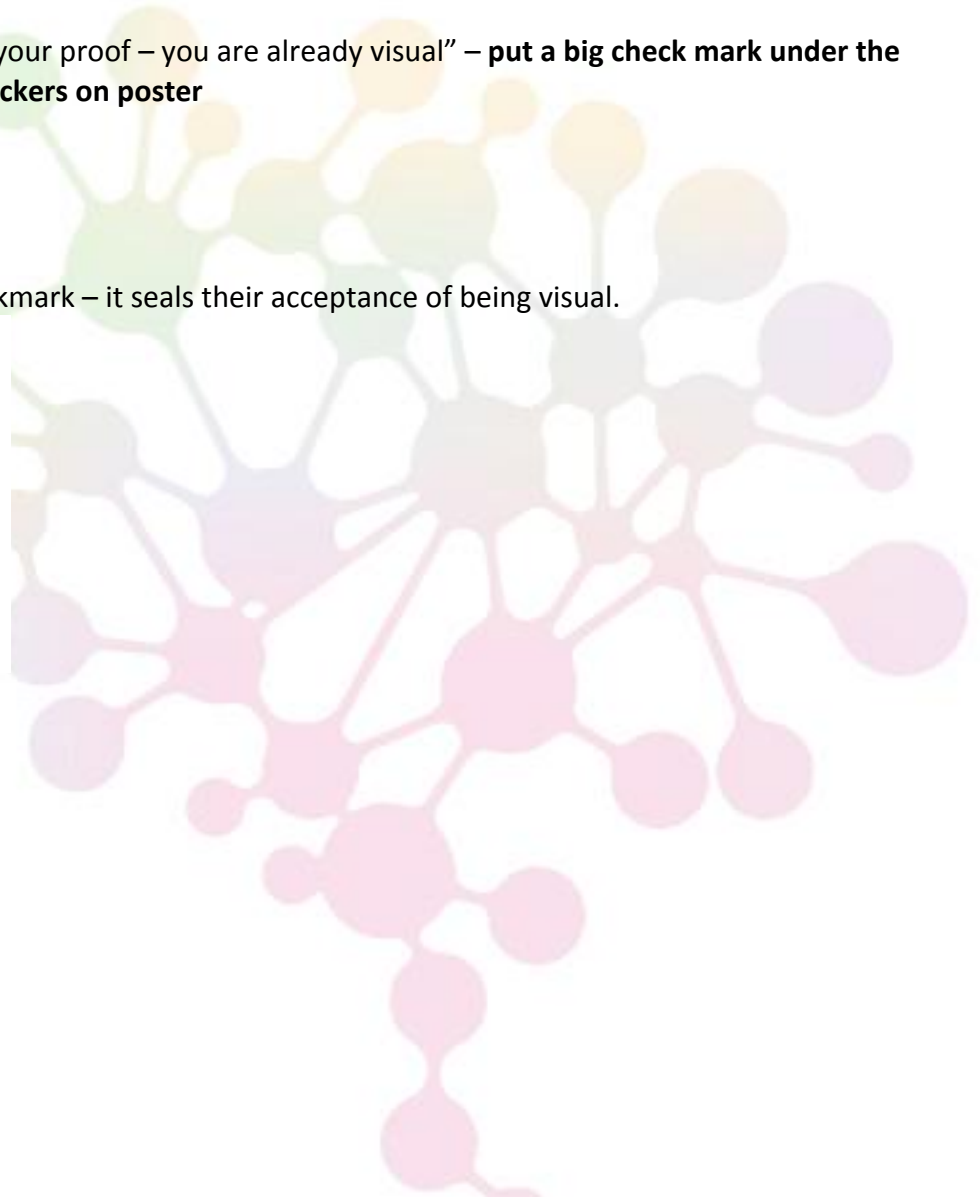
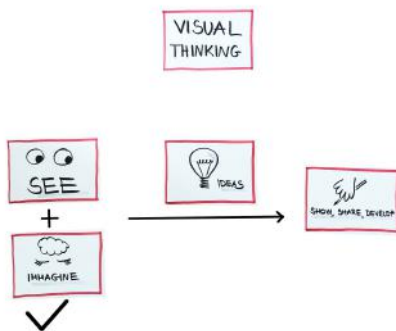
1. Point to the first part of the visual definition (“See” and “Imagine” stickers) and say: “Now, I am going to prove to you that you are already visual”.

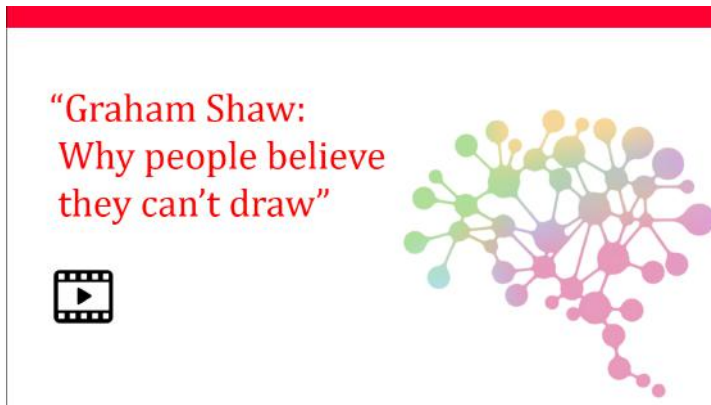
2. Give the “Lemon” exercise:

1. Say: “Now close your eyes. I will tell you a word and I ask you to watch how your brain reacts to this word. Ready?”
2. Say the word “Lemon”.
3. Ask debrief questions:
 - a. “What did your brain give you as soon as I said the word – was it a spelled word L-E-M-O-N or was it something else?” (a visual).
 - b. “How long did it take for your brain to access this information?” – speedy way to retrieve information.
 - c. “What associations did it give you?”
 - d. “Did it make you think of texture, scent, taste, location?” (Memory activation – we remember better through association with sensory information).
4. Say “So there you have your proof – you are already visual” – **put a big check mark under the “See” and “Imagine” stickers on poster**

Tips:

- Don’t forget to put the checkmark – it seals their acceptance of being visual.



SLIDE 6 (STEP 1) – THE “I CAN’T DRAW” MYTH


Goal: Address the **toughest fear** you will have to deal with concerning VT - which people think they can't draw. The goal is to convince them that it is **a skill**, not only God-given talent, and that it **improves with practice** - just like any skill.

You will need:

1. Poster with visual definition.
2. Do not play the video until the next step.

HOW TO PRESENT:

1. Point to the second part of the visual definition (“Show, share and develop” sticker) and say: “Now, let’s see how you are doing with the second part”.
2. Ask: “How many of you can **draw**? Lift your hands.”(Usually only 1 or 2 people lift their hands).
3. Ask: “Now, how many of you can **write**? Lift your hands.” (Everybody should have their hands up).
4. Say: “Great! And do you write like **Shakespeare**?”
5. Say: “So why do you think you need to draw like **Michelangelo** to say that you can draw?”
6. Say: “You don’t need to draw like Michelangelo to communicate your ideas - you need **basic drawing skills**. And now I will prove to you drawing is not only s talent, but a skill that you **can learn**.”

SLIDE 6 (STEP 2) – GRAHAM SHOW’S VIDEO - Why people believe they can’t draw

You will need:

1. Slide with video link.
2. Poster with visual definition.

HOW TO PRESENT:

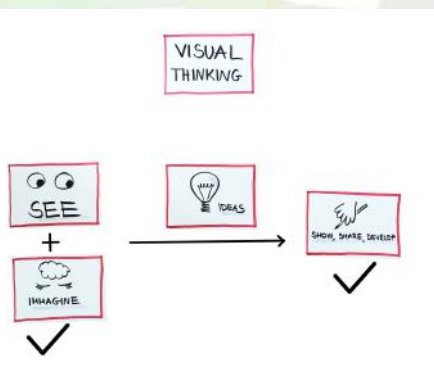
1. Introduce video:

“Now, I am going to play you a video by Graham Shaw who is a professional trainer when it comes to consult businesses how to make convincing presentations. He has worked with companies such as British Airways, Siemens, Pricewaterhouse Coopers. This is his TEDx presentation on drawing as a tool. It’s fun and easy to follow. Try it out!”

2. Ask participants to draw together with him, as he is drawing and follow him yourself.
3. Play video link on the slide until 8:30.

4. Say:

“As you see, you can already sketch something - in just several minutes you learned to do so; and you will learn a lot more - the point is: it is a skill!” - **put a big check mark under the “Show, share, develop” sticker on poster.**



TIPS:

Here is some additional information about Graham Shaw – it is not compulsory to present it.

Graham is an international conference presenter and trainer. He specialises in advanced communication skills and has helped thousands of people to develop the professional skills required to make convincing presentations.

Many directors and managers required to make important speeches and conference presentations have benefited from Graham's coaching. He helps people to develop their skills in the areas of influencing, coaching, training and facilitating. In particular he coaches people to enhance their personal presence and impact in talks and conference presentations.

He was invited to speak at the 'TEDx Hull 2015' and the video of his talk is now part of the TEDx Library of online talks. Over three million people have watched the talk.

Graham is the author of the book 'The Art of Business Communication' which was shortlisted for the CMI Management Book of the Year Award 2016 and thereby awarded Chartered Management Institute's 'Management Gold' recognition. It has featured in WH Smith's Business Book Chart, is regularly in Amazon's top 100 books on Business Communication Skills and was a Pearson Business Book of the Month.

As a former manager in Corporate Training at British Airways, he was responsible for the delivery of leadership and management development training at all levels in the company.

Just some of the numerous organisations he has helped in over twenty years of consulting include: Air Products, BP, Bally, Birmingham City University, BskyB, the BBC, B&Q, British Airways, British Gas, CBRE, GlaxoSmithKline, the Home Office, HSBC Bank, Oracle, Pricewaterhouse Coopers, the Samaritans, Siemens, Skipton Building Society, Specsavers, Tesco and various International Organisations.

SLIDE 6 (STEP 3) – QUALITY OF SKETCHES

Goal: Make people at ease because the **sketches don't need to be beautiful or perfect.**

You will need:

1. Blank flip chart sheet.
2. Four stickers (Prepare in advance.)



HOW TO PRESENT:

1. Put the sticker **“Quality of sketches”** and say:
 - a. “Now you know that sketching is a skill that you learn and we will teach you how to do it. But before that: what quality of sketches are we expecting?”
2. Put **“Artistic vs. Functional”** sticker and say:
 - a. “We are not aiming for beautiful drawings - we need functional sketches to communicate our ideas - nothing more. So don’t feel intimidated or pressured to produce the perfect sketch.”
3. Put **“Rough is better than polished”** sticker and say:
 - a. “It is found that people respond better to rough sketches than polished picture-perfect images. Our brain feels challenged by the rough and unfinished visual and automatically puts an effort to make sense out of it and fill in what’s missing. This actually means the brain becomes curious and alert, rather than bored with seeing the typical stock images in powerpoint slides - a.k.a Death by powerpoint.”
4. Put **“Quick and easy to change”** sticker and say:
 - a. “Sketches need to be quick in order not to lose time. They hand drawing is the quickest way between an idea in your head and presenting the idea to others, no the computer and the slides. Also, a sketch can be changed on the go - in fact it should be inviting also even for other people to change it and expand its meaning. That’s how we use sketching for brainstorming in groups for example.”

Tips:

- Put stickers one by one (this is called “progressive disclosure”).
- Always keep the definition poster and stickers at a prominent place, throughout the training, so that people come back to it.

SLIDE 7 (STEP 1) – Why we need VT in teaching?


Goal: Warm-up participants to realize that teaching dependent on words does not cater to the needs of the majority of students, because human brain relies more on visuals than anything else

You will need:

1. Slide 7 with video link.

HOW TO PRESENT:

1. Say: “OK, this is all great, now you know what VT is and you are comfortable that you can and will learn how to sketch. But in the end we need to clear the toughest question: WHY we need visual thinking in teaching?”
2. “Before we answer this I would like your reactions on a brief video called: “Teaching without words.”
3. Play video from the slide until 2:33.
4. Ask them for their reactions.

Tips:

- Make sure you have watched the whole video, because participants will ask you how it unfolds - but you don't need the rest of the video in order to make your point

SLIDE 7 (STEP 2) – 75% visual neurons
Goal:

- Give explanations why our brains are predisposed to gather the most information from visuals.
- Give explanation why our brains more creative when using their visual capability.

You will need:

1. Sticker (prepared in advance)



HOW TO PRESENT:

1. Put the sticker “75% of our sensory neurons are” on a new blank flipchart and say: “If you wondered why such a small portion of the graph in the video are students who learn well with words - this is the biological explanation. Of all the 5 senses that we have, we get **75% of the information through our eyes.**”
2. Add: “From **evolutionary** perspective, we developed our sight long before we could speak or write. This is because of survival instincts - we had to be able to spot danger (the bear in the bush) as fast as possible.
3. Add: “Also, we used to pass the knowledge through stories with drawings - cave drawings - which are the first way people used to communicate - it was not writing.”
4. Add: “There is the **myth of left and right-brained people**. It says that the right part of the brain controls rational functions, deals with facts and numbers and logic, while the left part is charged with emotions, creativity, colours, composition, etc. The truth is the two parts are predominantly responsible for these functions, but they are not confined to only one half of the brain. It means that you are constraining yourself, if you consider yourself more left-sided or right-sided. You are constantly using both parts.”
5. Add: “But you need to **get better at using both parts efficiently**, which means you need to stimulate yourself. For example, instead of writing a list from top to bottom, you do a mind map or a concept map. They make you use both parts efficiently just by stimulating the predominantly visual part which in turn makes the analytical part come up with more ideas.”

SLIDE 7 (STEP 3) – Reasons to us VT – SUM UP

Goal:

- Sum-up all the reasons why using VT gives us an advantage compared to traditional techniques.

You will need:

1. Stickers (prepared in advance).



Tips:

- Put stickers one by one (this is called “progressive disclosure”).

HOW TO PRESENT:

1. Put “Unlock creative power” sticker and say:

“To sum up, using visual thinking methods gives you access to the full potential of your brain, by stimulating both hemispheres, as well as the ability to make associations with ideas and knowledge, as well as increasing memory. In simple words: visual thinking is your shortcut to being creative.”



2. Put **“Communicate faster”** sticker and say:

“Ok, but once you get all creative, what use is it to you if you cannot share your ideas with others. This is another side effect of using VT - through combining sketches and words your audience immediately grasp your message. The old saying a picture is worth a 1000 words is actually based on the science of how your brain functions.”



3. Put **“Increase collaboration”** sticker and say:

“Once you increase the speed of communicating your ideas with others, effective collaboration comes naturally. All the tools used are meant to be used in VT in teamwork because this is where ideas become clearer and richer as everybody is building on top of each other’s knowledge and ideas. This could never happen if your ideas are described as paragraphs in a text.”



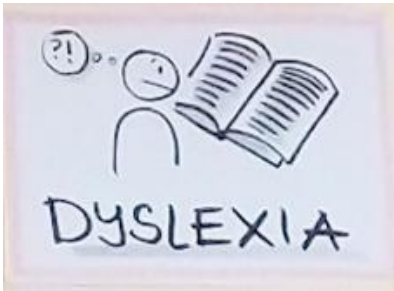
4. Put **“Simplify”** sticker and say:

“Another great benefit of visuals is that they tend to simplify ideas naturally and put order in your thoughts. Try to break down a complicated idea through sketches, and see how simpler and clearer it will become immediately.”



5. Put “Dyslexia” sticker and say:

“And last but not least, using visuals and visual thinking has proven immensely helpful to dyslexic students and dyslexic people in general; this is because for them it is generally much easier to think in images to begin with. They just need to be reassured that expressing their thoughts in images is a valid method of thinking and communication.”



SLIDE 8-13

The slide grid contains six examples of visual thinking tools:

- Storyboards:** A slide showing a newspaper article with several yellow sticky notes attached to it.
- Visual notetaking:** A slide showing a page of text with various drawings, arrows, and annotations.
- Visual notetaking:** A slide showing a page of text with a large, hand-drawn diagram illustrating a concept.
- Mind map:** A slide showing a colorful mind map with a central figure (Superman) and various branches.
- Mind map:** A slide showing a mind map with a central image of a group of people and various branches.
- Mind map:** A slide showing a mind map titled "Study of Body Systems" with a central image of a human body and various branches.

HOW TO PRESENT:

Say : “Now, I will show you some examples of how visual thinking is used in school.”

Goal:

- Give examples of some uses of VT in school environment.

You will need:

1. Slides 8-13

Tips:

In the Carrie Baughcum's you tube channel you can find more detailed info about each tool. Now it is not necessary to present the tools in details as they will be introduced at the end of the training.

<https://www.youtube.com/channel/UC9dE2wLRzY0Lu1ldXnzShxg>

NOTE!!!

This is the end of the introduction to VT theory and examples for people who have never practiced it. Now you can move on Intro to sketching techniques and the VT tools.

If you choose you can skip showing the sketching techniques slides and draw all examples yourself. It will have much **more impact** on the participants and they will be able to practice their sketching skills. If you choose to skip the slides you can show them to the trainees at the end of the exercise as a reference.



SLIDE 14



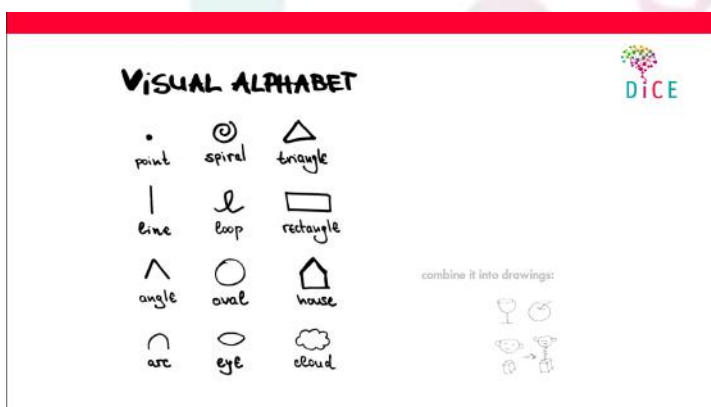
Goal:

- You've already set the foundations of sketching in the participants. Now help them to develop even further.
- In slides 15-21 you will find examples for the main elements, which will be useful for them to learn how to draw. It is not necessary to follow the exact same pictures but to cover the topics that are showed.

You will need:

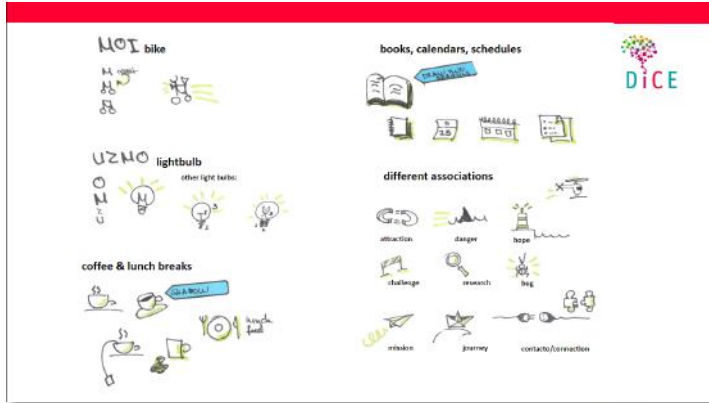
- Lots of paper A4.
- Markers.

SLIDE 15



You will introduce a series of basic shapes that will help the participants to build their own visual alphabet.

SLIDE 16



Exercise 1: MOI bike

By using the letters M – O – I draw a bicycle.

Exercise 2: UZMO light bulb

By using the letters U-Z-M-O draw a light bulb.

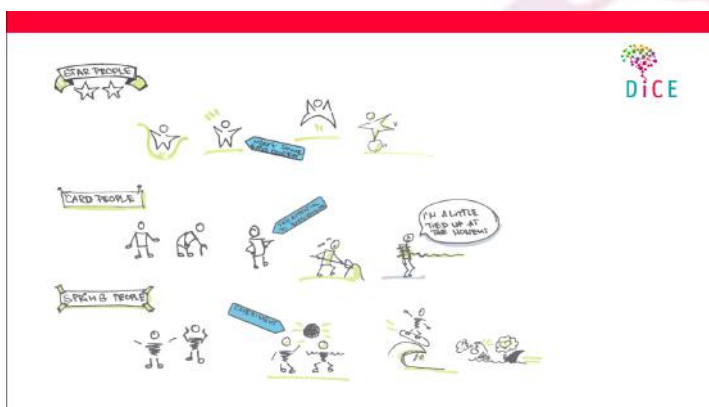
With these two exercises you demonstrate that it is possible to draw by using well know elements like letters.

Practice how to draw elements you will need in your classes:

COFFEE & LUNCH BREAK; BOOKS, CALENDARS, SCHEDULES

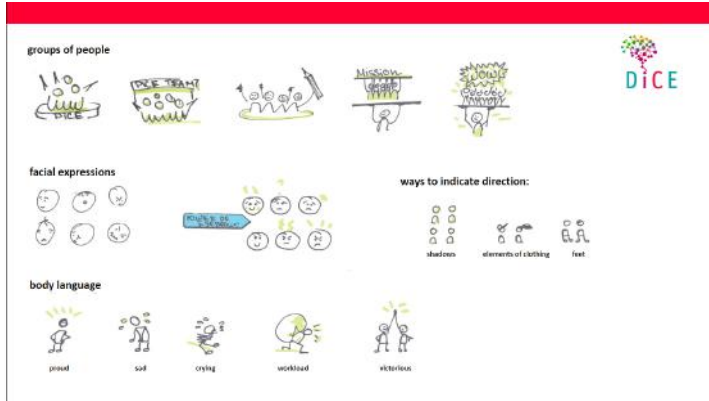
Practicing how to draw **different associations**.

SLIDE 17



Draw different people, banners and speech bubbles.

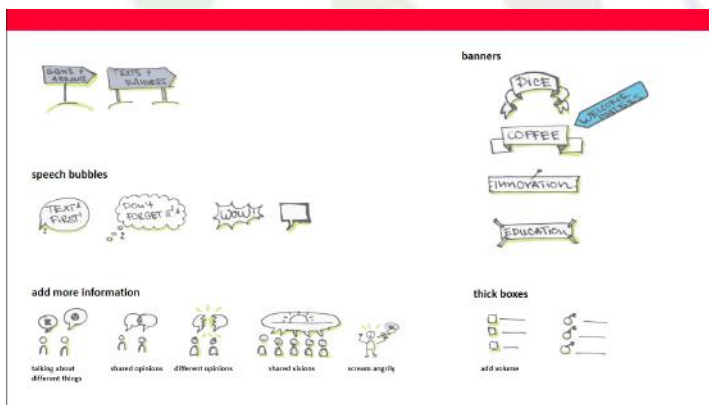
SLIDE 18



The next exercises practice:

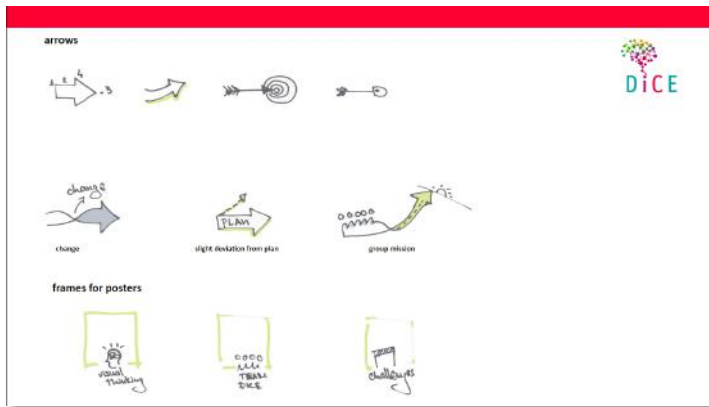
1. How to draw groups of people.
2. How to make different facial expressions.
3. Body language.
4. Ways to indicate direction.

SLIDE 19



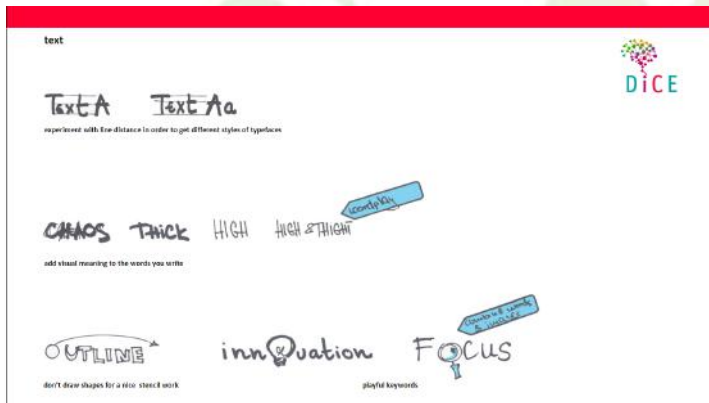
1. Banners. TIP – write first the text, then draw the banner.
2. Thick boxes.
3. Speech bubbles. TIP – write first the text, then draw the bubble.
4. Additional information.

SLIDE 20



1. Arrows
2. Frames for posters

SLIDE 21



NOTE!!!

This is the end of the sketching class.

SLIDE 22

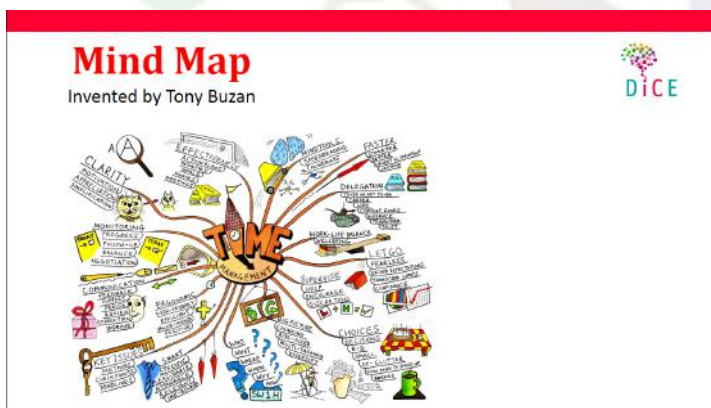


Say:

“Now we will introduce you to 6 of the most powerful visual thinking schools. Some of them are used to express ideas others for organisation and visualisation of the workflow. The use of the tools is not limited to the particular examples. If you think you have an alternative way of using them go ahead! Visual thinking is not limited! We give you guidelines, you follow your needs.”

☺ You can also write back to the DICE team to show us what other ways you developed in your classes.

SLIDE 23



TOOL KEYPOINTS:

1. Invented by Tony Buzan - neuropsychologist interested in how the brain learn efficiently
2. Designed the mind map to imitate the structure of the neuron; based on the notion of radiant thinking - the brain thinks from a centre notion and attaches info to it. It doesn't think from left to right and in lists - note taking is flawed.

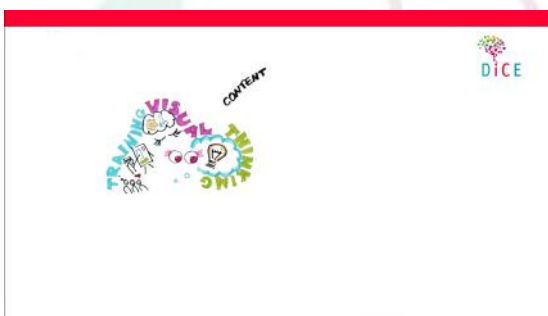
3. The goal is to stimulate the whole brain with images and colours. The brain loves these and doesn't get bored and **it creates hierarchy but not order!**
4. You can number the items in the end to give them order (ex. if you are planning the structure of an essay, report, thesis, time plan etc.)
5. If you are brainstorming and are stuck you can draw some empty branches and your brain will come up with new ideas.

TOOL INSTRUCTIONS:

1. Have a big working surface and orient it horizontally (see the steps in the slides 24 -35). If you want you can draw your own mind map using the same principle steps. If you decide to do that prepare it in advance and take pictures as you draw every next step following the example in the presentation. In this way it will be easier for you to communicate it and you will save time.
2. Put a big and colourful sketch of the topic in the middle.



3. If you use text make it 3 dimensional and colourful.
4. Write one word stemming from centre.



5. Put a tick coloured line underneath it



6. Draw and image near it.



7. Branch the line into less thick branches and write words with smaller font.



8. If you need to branch further go ahead as many times as you need.



9. Repeat the same process with new branches and new colours. **Always use caps letters!**



10. You can leave one branch without title for later if new ideas come to you.



11. The further away you get the smaller the words and thinner the lines should be.

INFO ABOUT THE INVENTOR (not necessary to introduce it):

In 1964, Tony Buzan graduated from the [University of British Columbia](#) in psychology, English, Mathematics and the General Sciences.

As the inventor of [Mind Mapping](#) he is the world’s prominent expert on ‘Mental Literacy’. On this subject, Tony Buzan has written over 100 bestselling books, translated into 150 languages and read by millions of people worldwide.

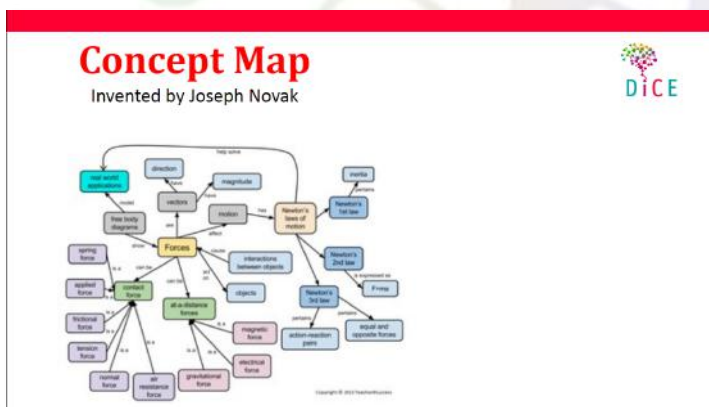
Tony Buzan is an expert in the field of the thinking process, creativity and innovation. [Mind Mapping](#) is used by approximately 250 million people.

Furthermore, Tony Buzan is an authority on the principles of learning, productivity and efficiency. He has provided consulting services to large international organizations such as Microsoft, [IBM](#), Walt Disney, Encyclopaedia Britannica, Barclays International, McLaren Technology, British Telecom, the Royal Mail, Goldman Sachs, Oracle, STABILO, BBC, BP, Liechtenstein Global Trust, etcetera.

Tony Buzan is also an excellent and recognized speaker in the field of the thinking process, creativity and innovation.

His mastery of his subjects coupled with his enthusiasm and engaging manner are characteristic for his seminars and presentations.

SLIDE 35



TOOL KEYPOINTS:

1. Designed by Joseph Novak, scientist and educator in the 70s.
2. Concept maps are the predecessors to the mind maps; Buzan used the concept map as a starting point for the mind map development.
3. Has no hierarchy of information.
4. Also a good method, but does not stimulate the brain as the mind map.
5. Advantage: it is quick to make.
6. You can add colours, names and arrows.

TOOL INSTRUCTIONS:

1. Have a big working surface and orient it horizontally (see the steps in the slides 36 -40). If you want you can draw your own concept map using the same principle steps. The same rules apply as for the mind map.
2. Put a big title in the middle and circle it.



3. Write **concepts** related to the topic around main topic and put them in circles. Draw **lines with arrows** to connect the related concepts and label them with words to describe the connection.



- Repeat the action going into the different categories. The further from the main bubble, the smaller the bubbles should be.



- Each section can be connected with the others with more than one line.



INFO ABOUT THE INVENTOR (not necessary to introduce it):

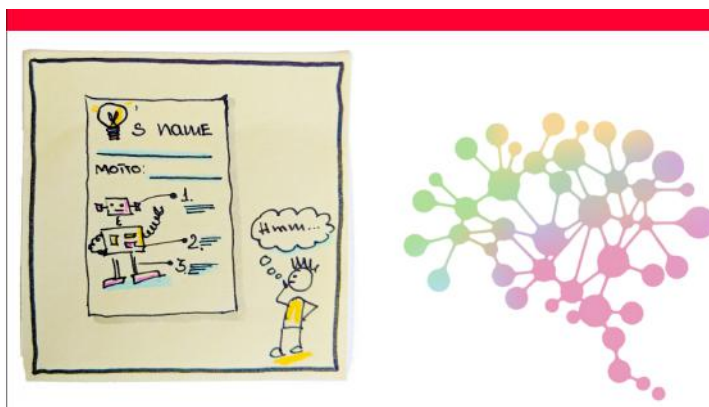
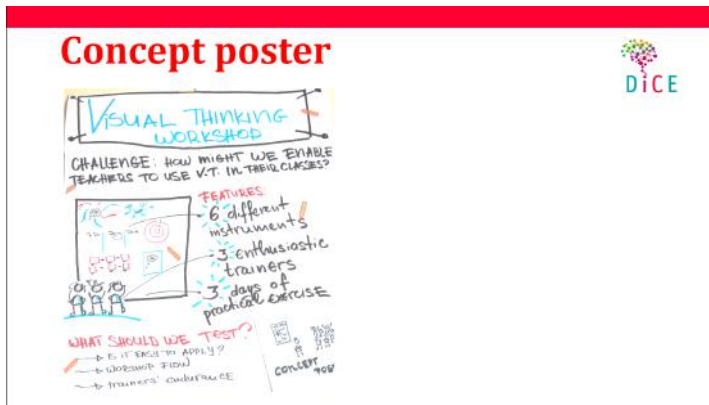
Joseph Novak received a B.S. in Science and Mathematics in 1952 from the [University of Minnesota](#), an M.S. in Science Education in 1954 from the [University of Minnesota](#), and completed his graduate studies in Science Education & Biology at the [University of Minnesota](#) in 1958.

Novak's research focused on [human learning](#), [educational studies](#), and [knowledge creation and representation](#). He has developed a theory of education to guide research and instruction, first published in 1977 and updated in 1998.^[1]

His latest research work includes studies on students' ideas on learning and epistemology, and methods of applying educational ideas and tools (such as concept mapping) in corporate settings and distance learning programs.

Beginning in the 1970s, Novak and his research team at Cornell developed the technique of concept mapping as a means of representing the emerging science knowledge of students.^[2] It has subsequently been used as a tool to increase meaningful learning in the sciences and other subjects as well as to represent the expert knowledge of individuals and teams in education, government and business.

SLIDE 41-42



TOOL KEYPOINTS:

A tool that allows you to capture and present the details about a conceptual solution combining visuals and words. It helps the team align about their idea and generate feedback on it.

Concept poster helps the team think; don't be afraid if the idea evolves as you work on it.

Concept poster is not a final presentation, don't make it perfect, rather be honest about the concept's challenges and how you will test them.

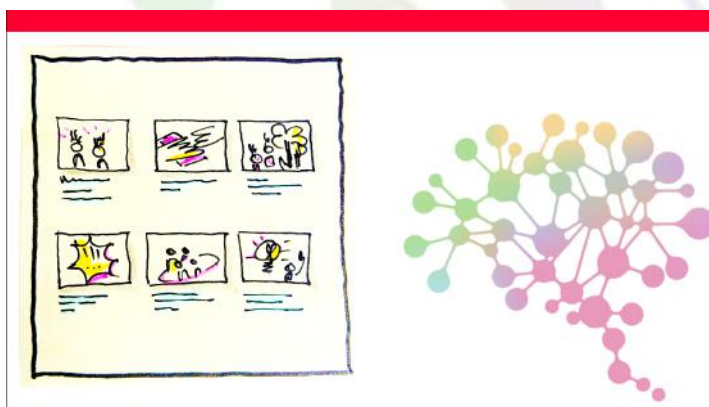
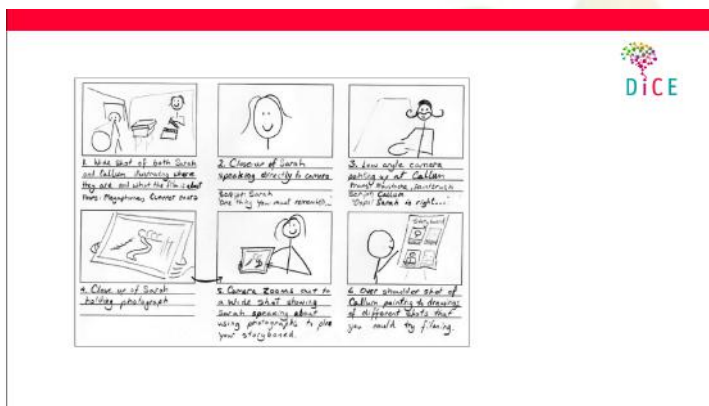
Make sure the concept poster functions on its own - the idea should be clear without additional presentation.

TOOL INSTRUCTIONS:

You will need 1 flipchart sheet; colour sharpies and markers.

1. Identify the idea to introduce and describe what it is for and how the concept work in brief.
2. Draw your concept in the middle and add details and features on the side - be as visual as possible.
3. Come up with a catchy name or phrase to bring the attention

SLIDE 43-45



TOOL KEYPOINTS:

A tool used to show the key elements and interactions of people with a new concept. It helps the team imagine different scenarios or how the concept could work out in practice and clear out details. Ultimately it aligns the team.

TOOL INSTRUCTIONS:

You will need post-its; sharpies

1. Identify the main subject and decide on the beginning, middle and end parts of the storyline
2. Draw 2-3 frames for each part
3. Order the frames according to the scenario and write a descriptive phrase below each frame

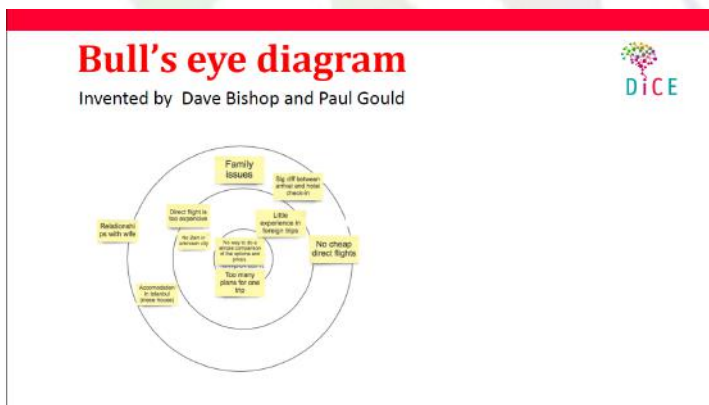
PRO TIPS

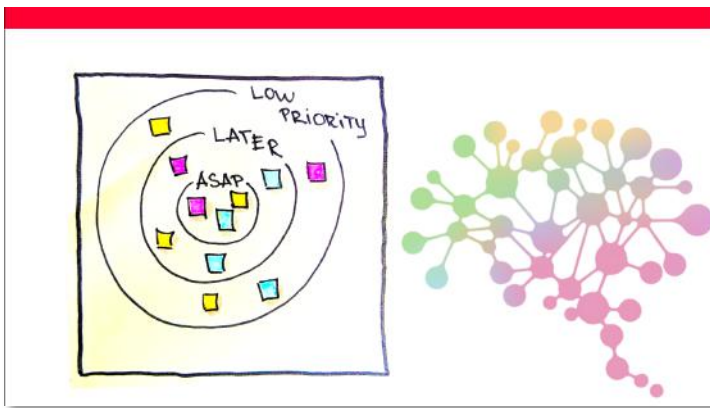
1. Use post-its for the different frames for flexibility
2. Determine the best view for each frame according to the message it brings: panorama/close-up
3. Add colour to emphasize on key elements

INFO ABOUT THE INVENTOR (not necessary to introduce it):

Webb Smith was one of the first members of Disney's story department. He created the idea of drawing scenes on separate sheets of paper and pinning them up on a bulletin board to tell a story in sequence, thus creating the first storyboard. From that point on, Walt Disney recognized the need for studios to maintain a separate "story department" with specialized storyboard artists, as he had realized that audiences would not watch a film unless its story gave them a reason to care about the characters. Webb is primarily known for his work on Snow White, Dumbo, and Pinocchio.

SLIDE 46-47





TOOL KEYPOINTS:

A tool that helps you to prioritize by ranking items in a target diagram. It accelerates decision-making and focuses the team by constraining the number of items with highest priority.

TOOL INSTRUCTIONS:

What you need: 1 flipchart sheet; small post-its, black sharpies.

1. Draw a target diagram on a poster containing three concentric circles.
2. Label them (primary -for the smallest one, secondary, tertiary) and write down the tasks/data on post-its.
3. Debate the relative importance of each post-it and move them around the circles to set your priorities.

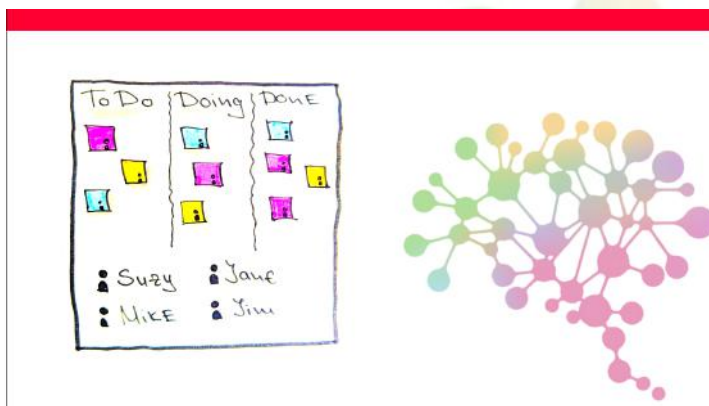
PRO TIPS:

1. Make the centre ring fit for a limited number of notes.
2. Set a time limit on each round of deliberation.
3. Think of new labels for the circles as a team in order to internalize them.

INFO ABOUT THE INVENTORS (not necessary to introduce it):

At the IDEA 2008 pre-conference workshop, Dave Bishop and Paul Gould from MAYA showed us another way to prioritize project tasks: a bull's eye diagram. It's still a ranking system but done visually rather than numerically. The team first lists out all the project tasks. These are then placed in the bull's eye based on where they fall in rank; the critical items are in the centre and the less important items moving towards the outer rings. If this is done on a whiteboard with the tasks on Post-it-Notes, then information can be quickly be moved around in relation to new tasks that are added to the bull's eye.

SLIDE 48-49

**TOOL KEYPOINTS:**

A tool that allows you to visualize and prioritize your team's tasks when working on a project. It improves the work flow by making each task tangible and its progress visible to the whole team as the project unfolds.

TOOL INSTRUCTIONS:

What do you need: 3 flipchart sheets, sticky notes in different colours, sharpies.

1. Draw three columns - TO DO, DOING, DONE.
2. Use post-its to write down your tasks, so you can move them around as their status change.s
3. Use various colours to create a categorization system (priority, person who is executing it, type of activity).

PRO TIPS:

1. Be consistent in the way you use the post-its, keep the descriptions short and always start with a verb.
2. Put the tasks with the highest priority at the top of "TO DO" column.

3. Let the team know as a task moves in a new column.

INFO ABOUT THE INVENTORS (not necessary to introduce it):

It all started in the early 1940s. The first Kanban system was developed by [Taiichi Ohno](#) (Industrial Engineer and Businessman) for Toyota automotive in Japan. It was created as a simple planning system, the aim of which was to control and manage work and inventory at every stage of production optimally.

A key reason for the development of Kanban was the inadequate productivity and efficiency of [Toyota](#) compared to its American automotive rivals. With Kanban, Toyota achieved a flexible and efficient just-in-time production control system that increased productivity while reducing cost-intensive inventory of raw materials, semi-finished materials, and finished products.

While kanban was introduced by Taiichi Ohno in the manufacturing industry, it is David J. Anderson who was the first to apply the concept to IT, Software development and knowledge work in general in the year 2004. David built on the works by Taiichi Ohno, Eli Goldratt, Edward Demmings, Peter Drucker and others to define the Kanban Method, with concepts such as pull systems, queuing theory and flow. His first book on Kanban – [“Kanban: Successfully Evolutionary Change for your Technology Business”](#), published in 2010, is the most comprehensive definition of the Kanban Method for knowledge work.

SLIDE 50



FINAL WORDS:

Now you have completed the Visual Thinking Lab module. You can give each participant a copy of the Visual thinking Cards. You can also discuss with them what other uses of these tools they can think of or what other visual thinking tools they know.

You will also receive a deck of cards with all the tools you were introduced here. (The deck contains 8 cards. They can be printed from the file VT TOOL CARD DECK.pdf. Print them double sided on a thick carton. If you use normal paper you can laminate them) Hand them at the end of the training.

FROM DICE TEAM:

Thank you for the interest in our work! We hope our work is useful and motivating for you! Please spread the word about the project, so everyone can benefit from our program!

RESOURCES:

1. [Visual Thinking](#) and [Visual Doing](#) by Willemien Brand
2. Verbal to visual yo utube channel:
https://www.youtube.com/channel/UCuFm4ARxn306IX_OWMnz0-w/playlists
3. Sketchnoting in the classroom: <https://www.verbaltovisual.com/sketchnoting-in-the-classroom/>
4. [VT games](#)
5. A lot of stuff here: https://creativemarket.com/blog/50-awesome-resources-to-create-visual-notes-graphic-recordings-sketchnotes?utm_source=Pinterest&utm_medium=CM+Social+Share&utm_campaign=Blog+Post+Social+Share&utm_content=50++Awesome+Resources+to+Create+Visual+Notes%2C+Graphic+Recordings+&Sketchnotes=
6. Mind maps for learning English grammar: <http://www.grammarmindmaps.com/>
7. A teacher that excels at using VT in class: [Carrie Baughcum](#)
8. Sketchnoting :
 - a. https://www.youtube.com/watch?time_continue=68&v=gY9KdRfNN9w
 - b. <https://www.youtube.com/watch?v=zNjyuJI5Lk&list=PL8b8DJclAGY9keHUQV1Ucu2y-0HL5uaXX&index=1>
 - c. <https://www.youtube.com/watch?v=O-bklczyy-o&list=PL8b8DJclAGY9keHUQV1Ucu2y-0HL5uaXX&index=2>
9. Book snaps:
<https://www.tammartin.com/booksnaps-snapping-for-learning/>
10. I can't draw:
<https://www.youtube.com/watch?v=miuADyBxeqE&index=3&list=PL8b8DJclAGY9keHUQV1Ucu2y-0HL5uaXX>

[Graham Shaw video](#)

11. Post-its to help you jumpstart sketchnoting:

https://www.youtube.com/watch?v=86hW_9cV3uE&index=8&list=PL8b8DJclAGY9keHUQV1Ucu2y-0HL5uaXX

12. Group sketchnoting:

<https://www.youtube.com/watch?v=tR796qkZUpE&index=10&list=PL8b8DJclAGY9keHUQV1Ucu2y-0HL5uaXX>

Books:

- [Visual catalogues](#), incl. [bicablo dictionaries](#)
- [Sketchnotestarthilfe](#) - drawing step by step
- [UZMO](#) - Presenting, Documenting and Exploring Visually
- [Visual Teams](#)
- [Generative Scribing](#)

Free download books:

- [Visual Facilitation Cookbook](#)
- [Graphic Express](#)

Tools and instruments:

- [Markers](#)
- [Ink for neuland markers](#)
- ["Magic" removable glue](#)

Some interesting professionals in the field of visual communication and facilitation:

- [Sandra Dirks](#)
- [Dough Neil](#)
- [Mike Rohde](#)
- [Kommunikationslotsen](#)
- [Dan Roam](#)
- [Brandy Agerbeck](#)
- [Scriberia](#)
- Facebook Group on [Graphic Facilitation](#)

See also:

[My presentation](#) on ideas about application of visual thinking.

[My favourite resources](#) I shared with you during my presentation.

1. Concept posters:

- [Piktochart](#)
- [Canva](#)
- [Glogster](#)
- [Easelly](#)

2. Concept and mind maps:

- [Thinklink](#)
- [Mindnode](#)
- [Mindmup](#)
- [Kidspiration](#)
- [Simplemind](#)
- [Imindmap](#)
- [Mindly](#)
- [Popplet](#)
- [Coggle](#)
- [Mindmeister](#)

3. Storyboards

- [Inkredible](#)
- [Procreate](#)
- [Storyboarder](#)

4. Drawing

- [Adobe sketch](#)
- <http://doodleinstitute.mykajabi.com/> - free courses on the power of doodling
- [Sketch50.org](#) - challenges to draw
- [Autodesk SketchBook](#) drawing + timelapse video
- [Tayasui Doodle Book](#)

5. Other cool stuff:

- [Explain everything](#) - visualise your conversations
- [Book creator](#) - making visual e-books
- [The Launch Cycle](#) - a design thinking framework for K-12 students



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