



Learning Styles

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PARTICIPANTS HAND-OUT

0 Goals of the session

By the end of the session, participants are expected:

- Understand the importance of Adult learning
- Explore the different steps of the Learning cycle and its modifications
- Learn and explore two different existing learning styles models



1 Content

0	Goals of the session.....	1
1	Content	2
2	About Adult Learning	3
3	Kolb Learning Cycle	5
4	Six Levels of Knowledge	7
4.1	Knowledge/Remembering	8
4.2	Comprehension	8
4.3	Application	8
4.4	Analysis	9
4.5	Synthesis	9
4.6	Evaluation/Creation	9
5	4MAT Learning types	10
5.1	Perceiving	10
5.2	Processing	10
5.3	4 Types of Learners	11
5.3.1	Type One Learners	12
5.3.2	Type Two Learners	12
5.3.3	Type Three Learners	13
5.3.4	Type Four Learners	13
6	4MAT Learning process.....	14
6.1	4MAT checklist	16
7	VAK Model (Visual, Auditory and Kinesthetic)	17
7.1	Senses	18
7.2	Representational Systems	19
7.2.1	The Kinaesthetic System	19
7.2.2	The Visual System	19
7.2.3	The Auditory System	19
7.3	Representational system preferences	20
7.3.1	Lead Representational System	20
7.4	Translating Representational Systems	20
8	Conclusion and Further readings.....	22
9	Further Readings	22
9.1	Web links	22
9.2	Books	22



2 About Adult Learning

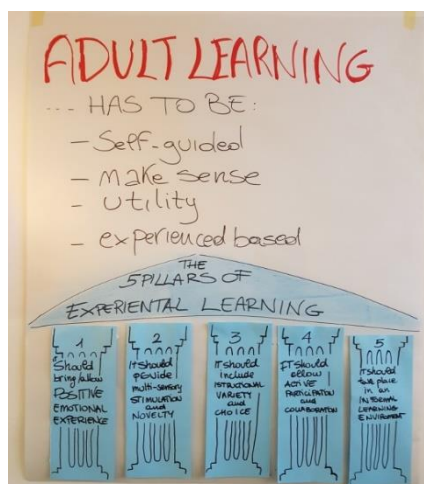
The first step in understanding the process of training is to understand how the learning happens for an adult. As we know, adults learn in a different way than children. What is their motivation? What helps them learn? What hinders their learning process? Training is not teaching: a trainer does not aspire to 'tell' people what they have to learn or what to do, but to 'show' them, and for that, he/she has to understand what has the most powerful impact and why before going forward into designing the training. Adult learning is an increasingly complex field and the theories that have been developed over the past decades are plenty to choose from. This handout will provide the theories that we found being the most relevant to training and the type of learning that training offers to the learner.

"Perspectives on adult learning have changed dramatically over the decades. Adult learning has been viewed as a process of being freed from the oppression of being illiterate, a means of gaining knowledge and skills, a way to satisfy learner needs, and a process of critical self-reflection that can lead to transformation. The phenomenon of adult learning is complex and difficult to capture in any one definition." Cranton, P. (1994). Understanding and Promoting Transformative Learning. San Francisco: Jossey-Bass, 3

Wherever you look in the vast theories that populate the learning studies field, there's one thing that everyone seems to agree on: adults learn differently from young people. Training as an activity of creating understanding, acquiring skills or changing attitudes usually deals with people who are, if not yet adults, very close to becoming ones.

Adult learners usually approach learning differently than younger learners:

- they are more **self-guided** in their learning;
- they bring more, and expect to bring more, to a learning situation because of their wider **experience** - and can take more away;
- they require learning "to **make sense**";
- they will learn when they understand the **utility** of the topic in their lives and when they can apply it in their immediate realities.





As adults have their learning process boosted through activities that incorporate experiential learning (also brain-friendly activities), we need to bear in mind that our activities respect the **5 Pillars of Experiential Learning**:

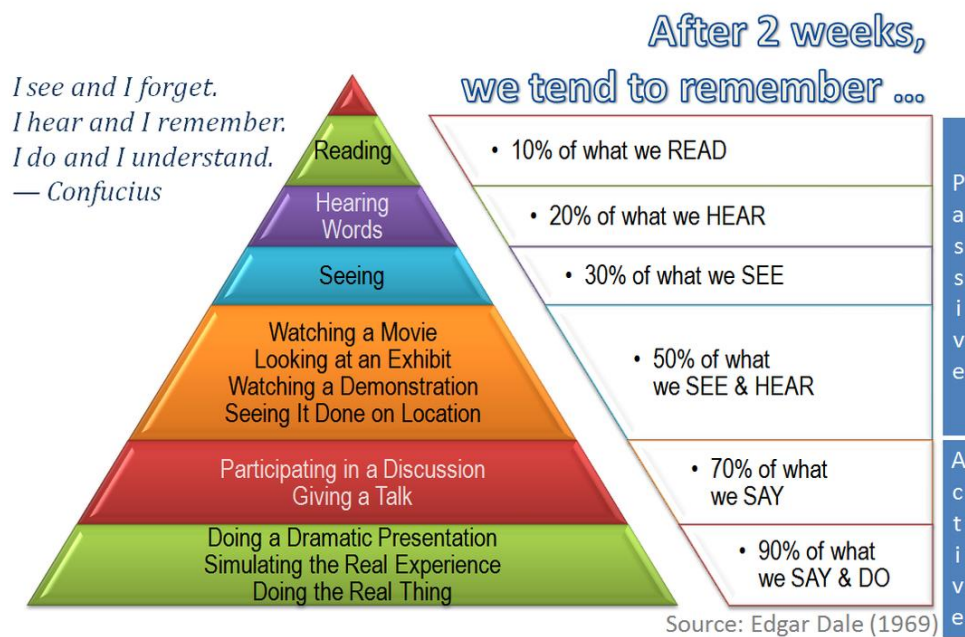
1. It should bring/allow **positive emotional experience**
2. It should provide **multi-sensory stimulation and novelty**
3. It should include **instructional variety and choices**
4. It should allow **active participation and collaboration**
5. It should take place in an **informal learning environment**

When you want to facilitate a process of learning, you first think about the fact that whatever your goals are, people will need to remember the information, and the question following naturally is: what do they remember better? And how?

To answer these questions and dive deeper in this topic, we will use for that the theory developed by Edgar Dale: **Dale's Cone of Experience**.

The Cone of Learning

sparkinsight.com



Edgar Dale (1900-1985) was an American Educationist, who made several contributions to audio and visual instruction. When Dale researched learning and teaching methods he found out that much of what we found to be true of direct and indirect (and of concrete and abstract) experience could be summarised in a pyramid or 'pictorial device', Dale called 'the Cone of Experience'. According to this model, it is said that people remember:





The Cone of Experience purports to inform viewers of how much people remember based on how they encounter information. The percentages → 5% (lecture), 10% (reading), 20% (audio-visual), 30% (demonstration), 50% (group discussion), 70% (practice by doing) and 90% (teaching others) are not a result of a research, but have been used by Dale to show tendencies and is valuable as a metaphor, as he had originally designed it.

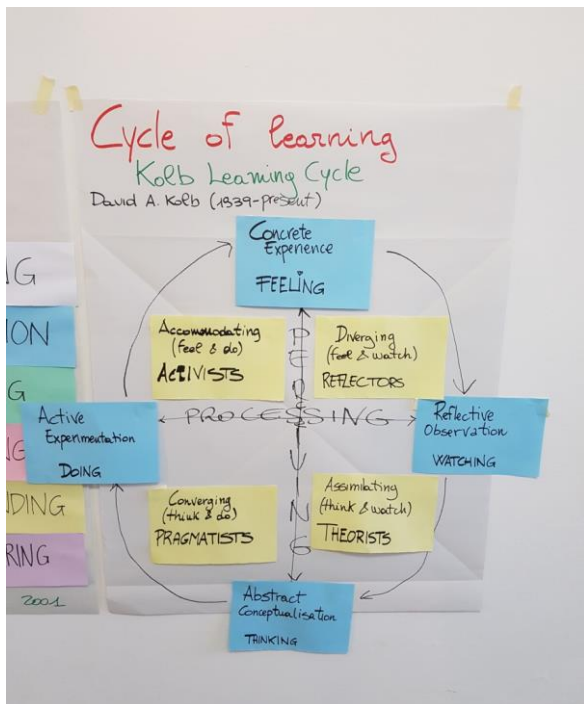
Dale points out that it would be a dangerous mistake to regard the bands on the cone as rigid, inflexible divisions. One of the things that are to be extracted from it is that ***the degree of retention and remembering increases along with the involvement of the learner in the process and with how much he gets the experience what he is learning.***

3 Kolb Learning Cycle

David A. Kolb (1939-present) was an American educational theorist whose interests and publications focus on experiential learning. One of his most notable and famous works is described as the Kolb Learning Cycle. Kolb's learning theory sets out four distinct learning styles (or preferences), which are based on a four-stage learning cycle (which might also be interpreted as a 'training cycle'). In this respect Kolb's model is particularly elegant, since it offers both a way to understand individual people's different learning styles, and also an explanation of a cycle of experiential learning that applies to us all. Kolb includes this 'cycle of learning' as a central principle his experiential learning theory, typically expressed as four-stage cycle of learning, in which '**immediate or concrete experiences**' provide a basis for '**observations and reflections**'. These 'observations and reflections' are assimilated and distilled into '**abstract concepts**' producing new implications for action which can be '**actively tested**' in turn creating new experiences.

Kolb says that ideally (and by inference not always) this process represents a learning cycle or spiral where the learner 'touches all the bases', ie., a cycle of experiencing, reflecting, thinking, and acting.

Immediate or concrete experiences lead to observations and reflections. These reflections are then assimilated (absorbed and translated) into abstract concepts with implications for action, which the person can actively test and experiment with, which in turn enable the creation of new experiences.



Kolb's model therefore works on two levels - a four-stage cycle:

1. Concrete Experience [**feeling**] - (CE)
2. Reflective Observation [**watching**] - (RO)
3. Abstract Conceptualization [**thinking**] - (AC)
4. Active Experimentation [**doing**] - (AE)

and a four-type definition of learning styles, (each representing the combination of two preferred styles, rather like a two-by-two matrix of the four-stage cycle styles, as illustrated below), for which Kolb used the terms:

1. Diverging (CE/RO)
2. Assimilating (AC/RO)
3. Converging (AC/AE)
4. Accommodating (CE/AE)

Knowing a person's (and your own) learning style enables learning to be orientated according to the preferred method. That said, everyone responds to and needs the stimulus of all types of learning styles to one extent or another - it's a matter of using emphasis that fits best with the given situation and a person's learning style preferences.

Here are brief descriptions of the four Kolb learning styles:

Diverging (feeling and watching - CE/RO) - These people are able to look at things from different perspectives. They are sensitive. They prefer to watch rather than do, tending to gather information and use imagination to solve problems. They are best at viewing concrete situations several different viewpoints. Kolb called this style 'Diverging' because these people perform better in situations that require ideas-generation, for example, brainstorming.

Assimilating (watching and thinking - AC/RO) - The Assimilating learning preference is for a concise, logical approach. Ideas and concepts are more important than people. These people require good clear explanation rather than practical opportunity. They excel at understanding wide-ranging information and organizing it a clear logical format. People with an Assimilating learning style are less focused on people and more interested in ideas and abstract concepts. People with this style are more attracted to logically sound theories than approaches based on practical value.

Converging (doing and thinking - AC/AE) - People with a Converging learning style can solve problems and will use their learning to find solutions to practical issues. They prefer technical tasks, and are less concerned with people and interpersonal aspects. People with a Converging learning style are best at finding practical uses for ideas and theories. They can solve problems and make decisions by finding solutions to questions and problems. They are more attracted to technical tasks and problems than social or interpersonal issues.





Accommodating (doing and feeling - CE/AE) - The Accommodating learning style is 'hands-on', and relies on intuition rather than logic. These people use other people's analysis, and prefer to take a practical, experiential approach. They are attracted to new challenges and experiences, and to carrying out plans. They commonly act on 'gut' instinct rather than logical analysis. People with an Accommodating learning style will tend to rely on others for information than carry out their own analysis.

Most people clearly exhibit clear strong preferences for a given learning style. The ability to use or 'switch between' different styles is not one that we should assume comes easily or naturally to many people.

4 Six Levels of Knowledge

The Revised Bloom's Taxonomy

1956

Higher Order Thinking Skills

- Evaluation
- Synthesis
- Analysis
- Application
- Comprehension
- Knowledge

Lower Order Thinking Skills

2001

Higher Order Thinking Skills

- Creating
- Evaluating
- Analysing
- Applying
- Understanding
- Remembering

Lower Order Thinking Skills

Benjamin S. Bloom
1913-1999

Bloom, B., Englehart, M. Furst, E., Hill, W., & Krathwohl, D. (1956). Taxonomy of educational objectives: The classification of educational goals. Handbook I: Cognitive domain. New York, Toronto: Longmans, Green.

Anderson, L. & Krathwohl (Eds.). (2001). A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives. New York: Longman.

The need to make a distinction between different types of learning outcomes stems from the need to distinguish different levels and types of training provided. The most common outcomes in youth training are usually at the level of attitudes, cognitive strategies and intellectual skills.



4.1 Knowledge/Remembering

This level is defined as the awakening of new knowledge or the knowing of previously learned material or retrieving, recognizing, and recalling relevant knowledge from long-term memory. This may involve the recall of a wide range of material, from knowing common terms, specific facts, methods, procedures, basic concepts, and principles which can be used on a multiple choice examination.

This level represents the lowest level of learning outcomes in the cognitive domain. Ways to access this learning domain is to use multiple-choice tests, ask the participants to recount facts or statistics, ask for definitions or rules and quote a procedure.

Learning objectives at this level: *know common terms, know specific facts, know methods and procedures, know basic concepts, know principles.*

4.2 Comprehension

This level involves being aware of the literal message contained in communication and being able to show a grasp of the relationships between each of these elements in your content. The components of understanding include self-regulation, interpretation and extrapolation.

This may involve the use of self-regulation behaviour that is best exemplified by restating the problem in the students' own words, making the information personal or modifying the information to something which is more meaningful, such as changing a step-by-step process into a flow diagram.

Learning objectives at this level: *understand facts and principles, interpret verbal material, interpret charts and graphs, translate verbal material to mathematical formulae, estimate the future consequences implied in data, justify methods and procedures.*

4.3 Application

This level refers to the ability to use learned material in a new or unprompted use of an abstraction. It is the use of a concept in a new situation or unprompted use of an abstraction. It also includes applying what was learned to novel situation in another location. This may involve applying things such as rules, methods, concepts, principles, laws, and theories.

Learning objectives at this level: *apply concepts and principles to new situations, apply laws and theories to practical situations, solve mathematical problems, construct graphs and charts, and demonstrate the correct usage of a method or procedure.*



4.4 Analysis

This learning level can be described as the ability to examine a problem area in your subject and identify the various components, breaking the problem down, in order to better be able to focus attention on each. Analysing distinguishes between facts and inferences and determines how the parts relate to one another and to an overall structure.

This may involve the ability to draw conclusions from data or from information that provides factual information. It may also include asking for an explanation or interpretation of meaning from a given statement.

Learning objectives at this level: *recognize unstated assumptions, recognizes logical fallacies in reasoning, distinguish between facts and inferences, evaluate the relevancy of data, analyse the organizational structure of a work (art, music, writing).*

4.5 Synthesis

This learning level refers to the ability to make judgement based on criteria or standards, to combine parts to form new concept or idea. It is about compiling information together in a different way by combining elements in a new pattern or proposing alternative solutions

Learning objectives at this level: *write a well-organized paper, give a well-articulated speech, write a creative short story (or poem or music), propose a plan for an experiment, integrate learning from different areas into a plan for solving a problem, formulate a new scheme for classifying objects (or events, or ideas).*

4.6 Evaluation/Creation

This is the highest in the cognitive hierarchy because they contain elements of all the other categories, plus conscious value judgments based on clearly defined criteria. In this level, there is an expectation that the person can correlate elements in order to form unique or functional whole. It may also include terminology that includes: judgements being made, the values, purpose, or ideas; solutions, as perhaps even methods.

This may involve creativity and may include writing a well-organized theme or giving a speech. It also integrates learning from different areas into a plan for solving a problem, or developing new classifying etc.

Learning objectives at this level: *judge the logical consistency of written material, judge the adequacy with which conclusions are supported by data, judge the value of a work (art, music, writing) by the use of internal criteria, judge the value of a work (art, music, writing) by use of external standards of excellence.*



To sum up, here are the 6 levels of learning:

1. **Knowledge** – to recall, recognise, being aware of existence
2. **Comprehension** – to translate from one form to another
3. **Application** – to apply or use information in a new situation
4. **Analysis** – to examine a situation and break it down into parts
5. **Synthesis** – to put together information in a new way
6. **Evaluation** – to judge based on explicit criteria.

(Adapted from Klatt (1999) and Krathwohl, Bloom and Masia (1964).

A training program is designed so that after the training is done, the participant knows or will be able to.....

5 4MAT Learning types

The 4MAT model explains learning in terms of the ways people perceive and process information.

5.1 *Perceiving*

Human perception - the ways people take in new information - occurs in an infinite variety of ways, all of which range between experience and conceptualization.

Experience - Perception by personal engagement - sensations, emotions, physical memories; the immediate; the self. Being in it.

Conceptualization - The translation of experience in conceptual forms - ideas, language, hierarchies, naming systems. An abstract approach to learning. Being apart from it.

The interplay between the “feeling” of experience and the “thinking” of conceptualization is crucial to the learning process. It connects the personal values and perceptions of students to those of expert learners.

5.2 *Processing*

Human processing - what people do with new information - occurs in an infinite variety of ways, all of which range between reflection and action.

Reflection - Transforming knowledge by structuring, ordering, intellectualizing.

Action - Applying ideas to the external world; testing, doing, manipulating.

The interplay between the “watching” of reflection and the “doing” of action is crucial as it provides the impetus for acting on internal ideas. It encourages the learner to test ideas in the real world and adapt what they learn to multiple and ambiguous situations.

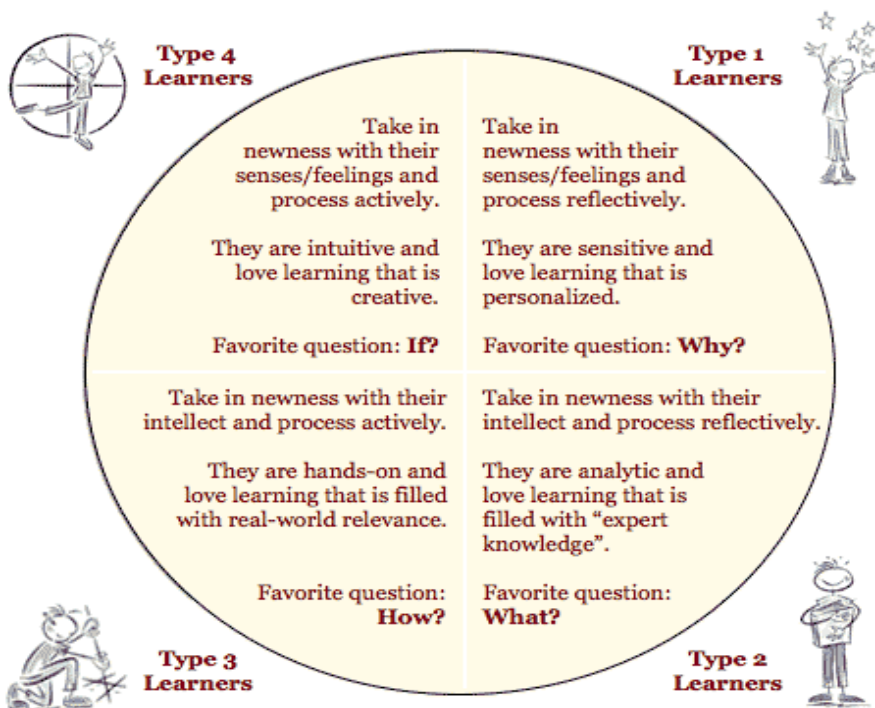


We can draw the way people perceive and process information as an axis, giving us 4 quadrants. These for quadrants each resemble one learning style, which for ease are just numbered from 1 to 4.



5.3 4 Types of Learners

People Learn Differently: Each learner brings a personalized approach to new learning. Which type of learner are you?





5.3.1 Type One Learners

Perceive information through direct experience and process it through reflecting. They learn by feeling their experiences, being present to them, trusting in their perceptions, and being open to sensory input. They take time to reflect and ponder their experience. They seek meaning and clarity. They integrate experience with the Self. They learn primarily in dialogue, by listening and sharing ideas. They excel in viewing these ideas from many perspectives. They have highly developed imaginations. They are insightful, absorbing reality, taking in the climate. They thrive on lots of reflecting time, especially when pondering new ideas. They seek commitment. They work for harmony and clue in to the needs of others with ease. They are great mentors. They nurture others to help them accomplish their goals. They tackle problems by reflecting alone and then brainstorming with others. They exercise authority through group participation. If participants are forced into a conflict situation (which is usually difficult for them); they will deal with it through dialogue and a great deal of listening. They build trust through personal interactions.

Their favourite question is "Why?" They seek to know the underlying values.

5.3.2 Type Two Learners

Perceive information through abstract concepts and process it through reflecting. They learn by thinking through experiences, judging the accuracy of what they encounter, examining details and specifics. They take the time to reflect and ponder on what they experience. They seek to achieve goals and to be personally effective. They integrate their observations into what they already know, forming theories and concepts. They excel in traditional learning environments and are thorough and industrious. They judge new learning by how theoretically sound it is. They are intrigued by how systems function. They look for structure. They thrive on stimulating lectures and readings. They seek continuity and certainty and are wary of subjective judgments. They have clearly defined goals and monitor cutting-edge research in their fields. They want to be as knowledgeable and accurate as possible. They are systematic. They tackle problems with logic and analysis. They exercise authority with principles and procedures. If they are forced into a conflict situation, they deal with it systematically, dissecting the problem before coming to a conclusion. They build trust by knowing the facts and presenting them systematically.

Their favourite question is "What?" They seek to know what the experts know.



5.3.3 Type Three Learners

Perceive information through abstract concepts and process through acting. They learn by thinking through their experiences, judging the usefulness of what they encounter. They take the time to figure out what can be done with what they learn. They seek utility and results. They integrate new learning by testing theories. They excel at down-to-earth problem solving, often tinkering to make things work. They learn best with hands-on techniques. And once they have it, they move quickly to mastery. They are pragmatists, they need closure and they like to get things done. They thrive in the company of competent people and excel at problem solving. They seek to get to the heart of things. They work for deadlines and "keep to the plan." They like to be considered competent. They help others to be competent. They tackle problems quickly, often with-out consulting others. They exercise authority with reward and punishment. If they are forced into a conflict situation, they deal with it by creating solutions. They build trust with straightforward forcefulness.

Their favourite question is "How does this work?" They seek to know the usability of theory.

5.3.4 Type Four Learners

Perceive information through direct experience and process through acting. They learn from their perceptions and the results of their experiences. They are open to all manner of sensory input. They take the time to consider the possibilities of what they learn. They seek challenge and are risk takers. They integrate their present experiences with future opportunities. They learn primarily through self-discovery. They excel at synthesizing. They are flexible and flourish in challenging situations. They are enthusiastic about enriching reality, putting new "spins" on things. They thrive on chaotic situations. They seek to influence others. They push their potential. They are at ease with all types of people. They actively seek growth and pressure others to do so. They tackle problems with their intuition. They exercise authority by influence and expect their people to be accountable. If they are forced into a conflict situation, they react emotionally and then move to cool rationality. They build trust with high communication skills and openness.

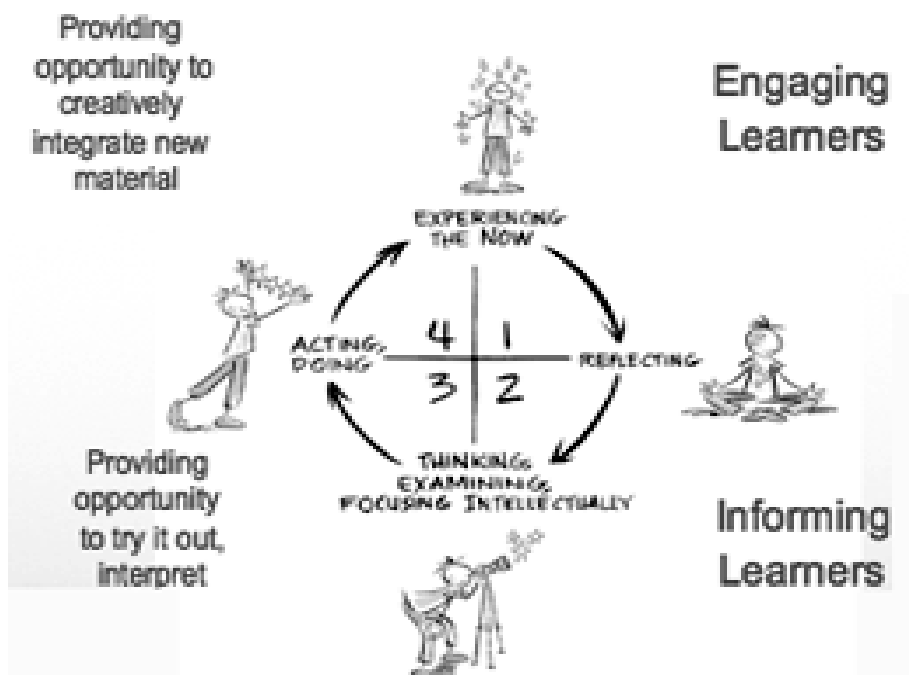
Their favourite question is "If?" or "What if?" They seek to know the possibilities.



6 4MAT Learning process

The main idea is to design the training in such a way that **all** different learning types are addressed, meaning that all participants will feel comfortable with the way the training was delivered, and that it will maximise the learning.

The origin of the process is the quadrant as presented above. Now what we do is we move from a static approach to a dynamic approach. During a training we will move from each quadrant to the next, reaching the full learning spectre.



Engaging learners (WHY) – this part is about creating an interesting situation, example, something that intrigues the trainees and motivates them to stay in the classroom and pay attention for the rest of the time. It can also serve to explain the relevance of the taught content, why do we actually need to deal with it. As the title says it creates a basic bond between the learner and the material, which helps maintaining focus later on.

Informing learners (WHAT) – this part is about presenting the underlying concept, building the model, and providing lots of data and background information. Normally this is what goes on during lectures. What should be kept in mind though is that all this should be still done in a colourful, creative way to enhance learning efficiency.

Providing opportunity to try it out, interpret (HOW) – this part is moving toward applications. How can we put into use the theory what we have learned? For skill development training it is the part when you start practicing new skills, but this time still with the aid of the instructor.





Providing opportunity to creatively integrate new material (IF) – in this part the trainee should already possess all the necessary theory and skills we thought. Now it is time to let him to try it out and find his own most suitable strategy. One way to do so is by presenting a complex problem where he can practice his new skills. Another important use of this quadrant is to prepare for the follow-up (what we also call transfer) of the training. What will happen in the future that keeps trainees motivated to use and sharpen the learned skills/knowledge?

What is important to note here: the order should always be followed and not mixed. The process always starts at the WHY quadrant. The interesting thing is that this cycle can not only be used for one training, but also in a smaller way for a specific training block, but also in a bigger picture, for designing an entire training event.



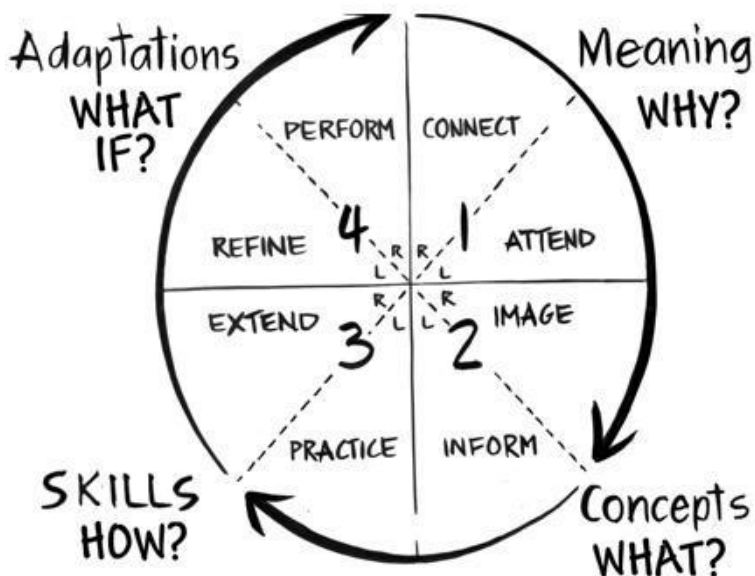
6.1 4MAT checklist

4MAT quadrant	4MAT step	Checklist
I Observation and direct experience (WHY?)	Connect	Did you use “have you ever...” questions? Did you prepare a Big Bang? Did you use exercise before theory?
	Attend	Did you include a sharing session? Did you plan debriefing after the exercise? Did you link the theory back what has been seen during the exercise?
II Abstract conceptualizing (WHAT)	Imagine	Did you plan creative delivery techniques for the theory part? Did you include the “what are we talking about” question? Did you make sure they can put the details into the big picture? Did you use metaphors?
	Inform	Did you design your explanation clear and concise (so that even a 4 th grade pupil would understand it?) Did you choose an interactive approach? Did you provide enough data? Did you prepare examples for the theory?
III Active experimentation and problem-solving (HOW?)	Practice	Did you plan exercise after the theory? Did you plan enough time for the exercise so it can unfold a practical outcome? Did you plan a hands-on exercise?
	Extend	Did you plan a “how to” discussion, where you can gather examples from participants? Did you provide a challenge to resolve? Did you provide enough freedom for participants in the exercise?
IV Integration of new knowledge and skills (WHAT IF?)	Refine	Did you provide opportunity to customize the learning? Did you provide a connection with the future?
	Perform	Did you provide them with a complex problem? Did you plan to motivate them to try? Did you plan to celebrate that they acquired the new skill/knowledge? Did you design a system for follow-up?





For the visuals among us:



7 VAK Model (Visual, Auditory and Kinesthetic)

The VAK learning style model implies that people can be divided into three different kinds of learners, being: **Visual**, **Auditory** and **Kinesthetic/Tactile**. This is one of the most popular models around because of its simplicity, however it is not fully supported by research.

Visual learners learn through seeing...They pay a lot of attention to body language and facial expression to fully understand the content of a message. They may think in pictures and learn best from visual displays including: diagrams, illustrated text books, videos and flipcharts. During a training, visual learners often prefer to take detailed notes to absorb the information.

To integrate this style into the learning environment there are some elements you should take into account, as in: use graphs, charts, illustrations, or other visual aids; include outlines, agendas, handouts, etc. for reading and taking notes; include plenty of content in handouts to reread after the learning session; leave white space in handouts for note taking; post flipcharts to show what will come and what has been presented; emphasize key points to cue when to take notes; supplement textual information with illustrations whenever possible; show diagrams and then explain them.

Auditory learners learn through listening... They learn best through verbal lectures, discussions, talking things through and listening to what others have to say. Auditory learners interpret the underlying meanings of speech through listening to tone of voice, pitch, speed and other nuances. Written information may have little meaning until it is heard. These learners often benefit from reading text aloud and using a tape recorder.





To integrate this style into the learning environment, you can: begin new material with a brief explanation of what is coming, conclude with a summary of what has been covered - this is the old adage of "tell them what they are going to learn, teach them, and tell them what they have learned."; use the Socratic method of lecturing by questioning learners to draw as much information from them as possible and then fill in the gaps with your own expertise; include auditory activities, such as brainstorming, buzz groups, etc; leave plenty of time to debrief activities - this allows them to make connections of what they learned and how it applies to their situation.

Kinesthetic/Tactile learners learn through moving, doing and touching... Tactile/Kinesthetic persons learn best through a hands-on approach, actively exploring the physical world around them. They may find it hard to sit still for long periods and may become distracted by their need for activity and exploration. They typically use colour highlighters and take notes by drawing pictures, diagrams, or doodling.

To integrate this style into the learning environment, try as much as possible to: use activities that get the learners up and moving; play music, when appropriate, during activities; use coloured markers to emphasize key points on flipcharts or white boards; give frequent stretch breaks (brain breaks); provide toys such as stuffed animals (as part of facilitation tools) to give them something to do with their hands; provide highlighters, coloured pens and/or pencils; guide learners through a visualization of complex tasks; have them transfer information from the text to another medium such as a keyboard or a tablet.

For us it is important to understand that people use all 3 channels to learn, but tend to have a preference for one of them - a natural way to learn. This means that when designing and delivering a training you should keep in mind that other people do not learn in the same way as you. Therefore a training session should cover all these channels.

If you are curious to find out more about your preferred learning style, you can do a short survey (link in the further readings).

7.1 Senses

Attention is directed through the senses. By paying attention on the outside, you enrich your thinking. By paying attention on the inside, you become more sensitive to your own thoughts and feelings, surer of yourself and better able to give your attention to the outside.



7.2 Representational Systems

Just as we see, hear, taste, touch and smell the outside world, so we recreate those same sensations in our mind, representing the world to ourselves using our senses inwardly. We may either remember real past experiences or imagine possible (or impossible) future experience. You can picture yourself running for a bus (remembered visual image) or running down the canals of Mars wearing a Father Christmas outfit (constructed visual image). The first will have happened, the second will not, but you can represent both.

We use our representational systems in everything we do - memory, planning, fantasizing and problem solving. The main systems are as follows.

7.2.1 The Kinaesthetic System

This is made up of our internal and external feelings of touch and bodily awareness. It also includes the sense of balance. The emotions are also included in the kinaesthetic system, although emotions are slightly different - they are feelings about something, although they are still represented kinaesthetically in the body. When you imagine balancing on a beam, imagine the feeling of touching a smooth surface or feeling happy, you are using your kinaesthetic system.

7.2.2 The Visual System

This is how we create our internal pictures, visualize, daydream, fantasize and imagine. When you imagine you are looking around one of your favourite places or picturing a good holiday beach, you are using your visual system.

7.2.3 The Auditory System

The auditory system is used to listen to music internally talk to yourself and rehear the voices of other people. Auditory thinking is often a mixture of words and other sounds. When you imagine the voice of a friend or one of your favourite pieces of music, you are using your auditory system.

We do not use our representational systems in isolation, just as we do not experience the world simply through one sense. Thinking is a rich mix of all the systems, just as experience comes through all the senses. However, just as some of our senses are better developed and more 'sensitive' to the outside world, so some representational systems will be better developed. We will tend to favour those systems. The preferred representational system usually links with a preferred or unusually acute sense. For example, if you pay a lot of attention to what you see, then you are likely to use the visual representational system for your thinking. With a visual preference you may be interested in drawing, interior design, fashion, the visual arts, television and films. With an auditory preference you may be interested in language, writing, drama, music, training and lecturing. With a kinaesthetic preference you may be interested in sport, gymnastics and athletics.

There is no 'right' way of thinking. It depends what you want to accomplish. However, creative people tend to use their representational systems in a more flexible way. Creativity often involves thinking of one thing with another system, perhaps to literally 'see in a new light'.



7.3 Representational system preferences

We constantly use all of our representational systems. We cannot think about anything without using at least two: the first to carry the information and the second to consider it in a different way. Neuro Linguistic Programming (NLP) considers thinking as chains of representation systems forming strategies - sequences of representational systems for a purpose.

What we call 'talent' is the result in part of the way a person uses their representational systems to make unusual and creative strategies. All memories are a creative cocktail of representational systems. They all have a visual auditory and kinaesthetic component. As already mentioned, however, we tend to favour one or two representational systems. We will typically turn to our preferred system when we are under pressure or stress. This could be a weakness if it limits our thinking to what is familiar in unfamiliar situations.

There are two things you can do to increase your own self-knowledge and flexibility of thinking:

1. *Know your own preference.*
2. *Develop your weaker representational systems.*

7.3.1 Lead Representational System

A lead representational system is the system we use to retrieve information from memory. For example, when you think about a holiday, you may first recover the visual memory and then think about it. In this case, the visual is the lead system. The lead system may be the same as the preferred system, but need not be. You can tell a person's lead system by studying his/her behaviour. For example, if you ask them about their holiday they might make a quick visual access to retrieve the memory (so the lead system is visual) and then tell you about the enjoyable time they had using many kinaesthetic movements (posture/gestures) thus showing their preferred system is kinaesthetic). **Important:** Avoid describing people as 'auditory' or 'visual' or 'kinesthetic' based on their preferred system. These are not identities, only preferences and capabilities.

7.4 Translating Representational Systems

Translating across representational systems means taking an idea and expressing it in different representational systems. These translations may be simple metaphors, for example:

Comfortable as a warm blanket. (K)
Comfortable as a well decorated room. (V)
Comfortable as a familiar name (A)

Uncomfortable as clashing colours in abstract art, (A)
Uncomfortable as crumbs in the bed. (K)
Uncomfortable as a rusty tuba playing out of tune (A)





Translation preserves the meaning but changes the form. It may be necessary so that people can understand each other. For example, a person with a preferred kinaesthetic system may not appreciate how distracting a cluttered room can be for a visual person unless you can translate, so you might say:

'Being in a cluttered room distracts me just as sitting in an uncomfortable chair would distract you.'

Translation is an important communication skill in business. Sometimes managers may seem to be disagreeing, but they are only disagreeing over the expression of an idea, not the idea itself. Once the idea is translated, they will agree. For example, a manager with a preferred auditory system may like to talk to their fellow managers to explain what they are doing, A fellow manager who prefers the visual system will more likely want to see something in writing and until they do, it is somehow not 'real'.

Here is an example with the predicates (=words that show different representational system) in italics.

The first manager is talking mostly kinaesthetically, the second is talking visually. They both agree something must be done, but the words are getting in the way of good communication.

M1: "I can't *grasp your* point about the accounts departments."

M2: "*Look* it's perfectly *clear*, we need to see what's happening with a report first before we decide."

M1: "Well, I'm *uncomfortable with* that approach. Let's *sit down* with David and *thrash it out*, person to person."

M2: "I think we will lose objectivity that way. With so many changes on the *horizon* we need to have the options *outlined in black and white*."

M1: "*Void on*, that's a bit hasty."

Finally, here are some common phrases with translations between representational systems.

GENERAL	VISUAL	AUDITORY	KINAESTHETIC
I don't understand	I am in the dark	That's all Greek to me	I can't make head or tail of it
I don't know	It's not clear yet	I can't tell if that's right.	I don't have a handle on that idea.
I understand	I get the picture	That rings a bell	That feels right.
I think	My view is...	Something tells me...	I hold these views...
I am confused	This is a mess	It sounds crazy	I can't get a grip





8 Conclusion and Further readings

There's a lot to consider when you design a training program, and how people learn is one of the first things because it has great influence on the way you choose to structure the learning for the participants. When designing a learning process, training focuses mainly on the fact that adults have specific motivations and that they learn mainly from experience. The way the learning happens, though, differs from one individual to another and while some methods and types of processes might work for some people, for others they may be unsuitable. Therefore, a training program has to be diverse enough as to engage in the learning all types of learners and keep them interested.

9 Further Readings

If you want to develop your knowledge from this document, below you can find some references that were used when designing this training session.

9.1 Web links

- <http://www.businessballs.com/kolblearningstyles.htm>
- [About Learning by honey-mumford](#)
- http://www.learningstyles.net/?gclid=CKHo2Z22_rrQCFUmN3godtRwAVw
- <http://www.simplypsychology.org/learning-kolb.html>
- <http://www.nwlink.com/~donclark/hrd/styles/vak.html> - VAK Learning Styles Survey

9.2 Books

- Neuro-Linguistic Programming Workbook by Joseph O'connor
- T-KIT6 – Training Essential
- Training for dummies by Elaine Biech
- The trainers' toolkit by Cy Charney & Kathy Conway
- Learning Styles Handout YTA 2012 and 2013, Irina Buruiana, Andrea Neacsu, Mirna Smidt, Lyda Michopoulos
- Knowledge Transfer and Virtual Communication Handout LSS 2012 - Herve Tunga