



# Sensory Preference Evaluation

Feedback Report for

Sample report

14th November 2010

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*'Upon the conduct  
of each depends the  
fate of all'*

*Alexander the Great*

## Contents

<b>Page</b>	<b>Details</b>
<b>3</b>	Introduction.
<b>4</b>	Your sensory preference overview.
<b>9</b>	Your detailed report on sensory preference.
<b>22</b>	How you compare with others.
<b>23</b>	Spotting the preference of others.



Your brain takes in more information from its immediate environment in a single day than the largest computer does in a year. That information is all received through by our five senses – seeing, hearing, feeling, taste and smell.

All sensory stimuli enter the brain as a stream of electrical impulses which result from neurons firing in sequence along specific sensory pathways. We are each very different in how we do this in terms of what information we seek out and in what format.



Research by individuals such as Ken & Rita Dunn and Richard Bandler & John Grinder link this idea of sensory preference to three distinct styles:

**Visual.** Learning through seeing. A preference for learning through pictures and diagrams.

**Auditory.** Learning through hearing. A preference for learning through the spoken word.

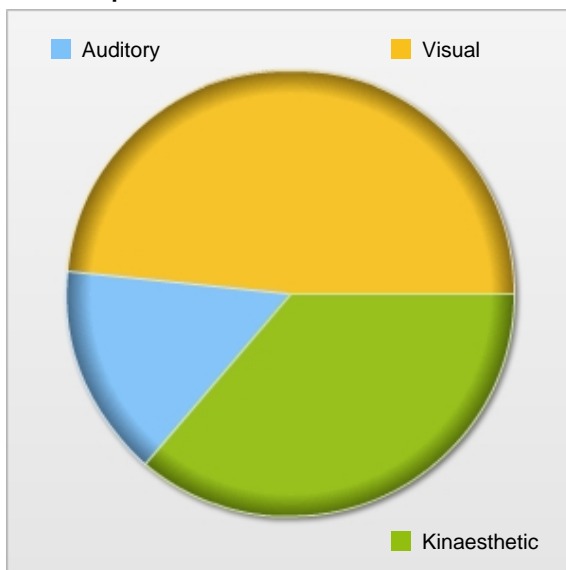
**Kinaesthetic.** Learning through direct involvement. A preference for physical or emotional contact with the material.

The evaluation which you have just completed will provide you with an indication of your unique blend of preferences.

This report analyses the implications of your scores and explores the current thinking about how you can use this information to enhance your own ability to learn, communicate and develop in the modern world.

## Your sensory preference overview

The evaluation allows us to determine the blend of sensory preference styles you prefer. The simplified results of your output are below:



## Your personal profile

The breakdown of your sensory preference profile is recorded in the box opposite.

*“Every human has a learning style and every human being has strengths. It’s as individual as their signature. No learning style is better or worse than any other style. All groups – cultural, academic, male, female – include all types of learning”.*

Professors Ken and Rita Dunn

## What your results mean

### Visual preference

Your score for taking in information using visual stimuli is HIGH. This means that you will tend to use visual processes as your primary method of both gathering information and also articulating it.

### Auditory preference

You have recorded a LOW score for taking in information using auditory stimuli. This means that you will tend not to use auditory processes for both gathering information and also articulating it.

### Kinaesthetic preference

You have a MEDIUM score for taking in information using kinaesthetic stimuli. This means that you will tend to use kinaesthetic processes in conjunction with at least one of your other senses for both gathering information and also articulating it.

## An overview of sensory preference

The three types of sensory preference – visual, auditory or kinaesthetic - can be summarised as follows:



### Visual

People with this preference like to absorb information through seeing or producing pictures, diagrams, moving images and colour and will tend to communicate with others by using the same processes.



### Auditory

People with this sensory preference will absorb information through hearing sounds and voices or by reading text and words. They will also tend to communicate to others using the same methods.



### Kinaesthetic

People with this preference absorb information better by being involved with the process. This may be through doing, moving or touching in a physical sense or, perhaps, by being emotionally involved.

### Frequency of preference

The University of Maryland (USA) tested the sensory preference of over 5000 students and found the following percentages of first choice preference:

- Visual (seeing) **29%**
- Auditory (hearing) **34%**
- Kinaesthetic (doing/feeling) **37%**

### Isolation of preference

The Maryland research is often misquoted to claim that (e.g.) '29% of people **ARE** visual'. It must be noted that we do not use these senses in isolation. We can have a preference which suggests that a certain sense or senses may dominate our communication style; however, we each have the ability to use all three of these senses and will do so at various degrees throughout our transactions with others.





Modern technology such as Magnetic Resonance Imagery (MRI) scans demonstrate that different activity is recorded in different parts of the brain dependant on which sensory preference is being used and that the process for developing such preference occurs over time.

It is easy to speculate that a combination of genetic disposition, life experience and habituation may result in some of these structures being marginally or holistically more efficient than others. Some of us might be better at remembering the look of things, others the sounds that accompanied the experience and others the feelings it evoked.

These preferences can occur over time as we mature from children into adults. From this point, our preferences tend to be engrained and constant.

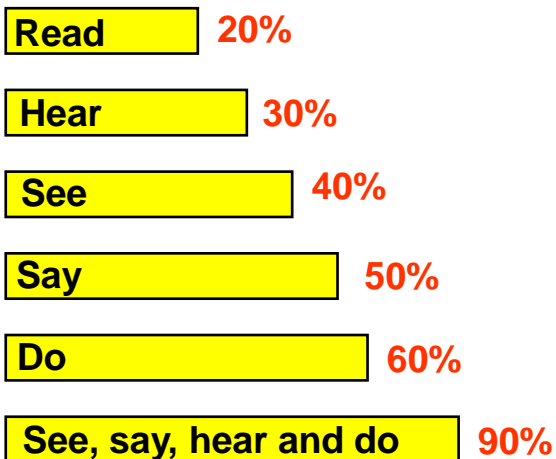
*“Among all the elements which make up a person’s overall style, three of our five senses (seeing, hearing and feeling) are **the ones which most influence information intake, memory and learning**. Translated into more technical terms, they can be described as visual, auditory and kinaesthetic sensory modalities or preferences.*

*Centres for processing sensory information are spread all over the brain and **develop at their own pace in each human being**. Children first begin learning and remembering difficult things by experiencing them kinaesthetically, which means that they have to involve their whole body for information intake and acquiring basic skills. This is why young children have to touch everything that interests them – they are learning through manipulation and interaction with objects and people. Around age eight, some children begin to develop strong visual preferences which allow them to take information in more through observing and watching what’s going on around them. Seeing becomes a very important learning tool. Around eleven years old many begin to become more auditory, which means that they can learn well mainly by listening and can easily remember complex information they hear”.*

Barbara Prashing (2004) The Power of Diversity

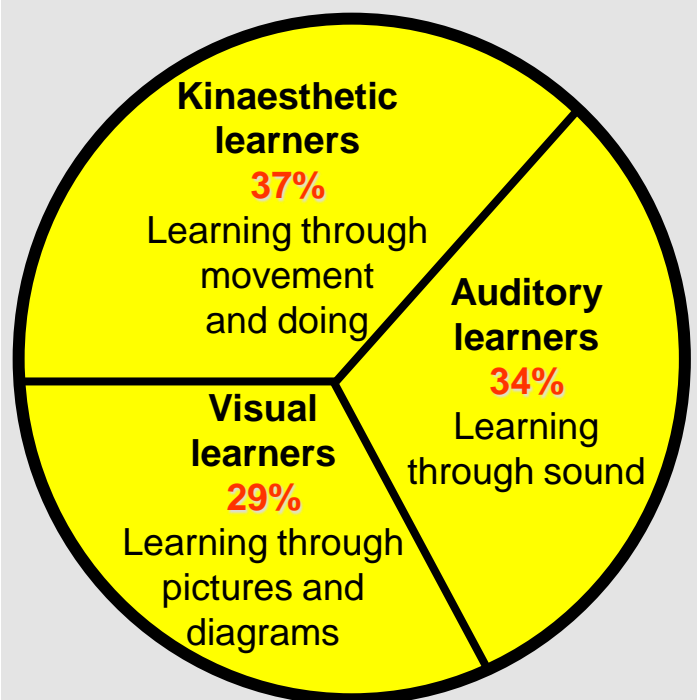


Research by Dr Vernon Magnesen of the University of Texas focussed on the impact of different learning processes on students. He found where a multi-sensory process was used in a random group, the impact was profoundly better than when single strategies were used.



The percentages above show the amount of recall students demonstrated 24 hours after their learning session. They learnt the same material using different methods.

As sated earlier in this report, the University of Maryland research about sensory reference provides a clear indicator on how a large group of people present a diversity of style and focus. Their percentage breakdown of potential preference is reflected in the diagram below:



However, it must be pointed out that it would be statistically incorrect that 37% of students are purely kinaesthetic learners, 29% purely visual and 34% purely auditory. Every student profile showed a certain percentage in each of the three categories and the percentages shown represent the mean average.

**What is true though is that we tend to react best to our dominant system.**

*“Advances in computer and brain imaging technology have allowed us to watch the brain at work. Scientists now know that different neural structures are used for different modes of learning. When someone looks at a words, scientists see more electrical and chemical activity in the visual cortex at the back of the brain. When someone hears a word, there is more activity in the language centres in the left hemisphere of the cortex. When someone completes planned, coordinated movements, activity is evident in the motor cortex. Neuroscientists have proved that different sensory inputs utilize different neural processing structures.”*

Alistair Smith and Nicola Call (1999) The ALPS Approach

## The brain and sensory input

Functional MRI has helped identify which parts of the brain are involved in specific mental tasks.



### AUDITORY

When someone looks at a word there is more activity in the left hemisphere of the cortex.

### KINAESTHETIC

When someone completes a movement or performs a physical task, there is more activity in the motor cortex.

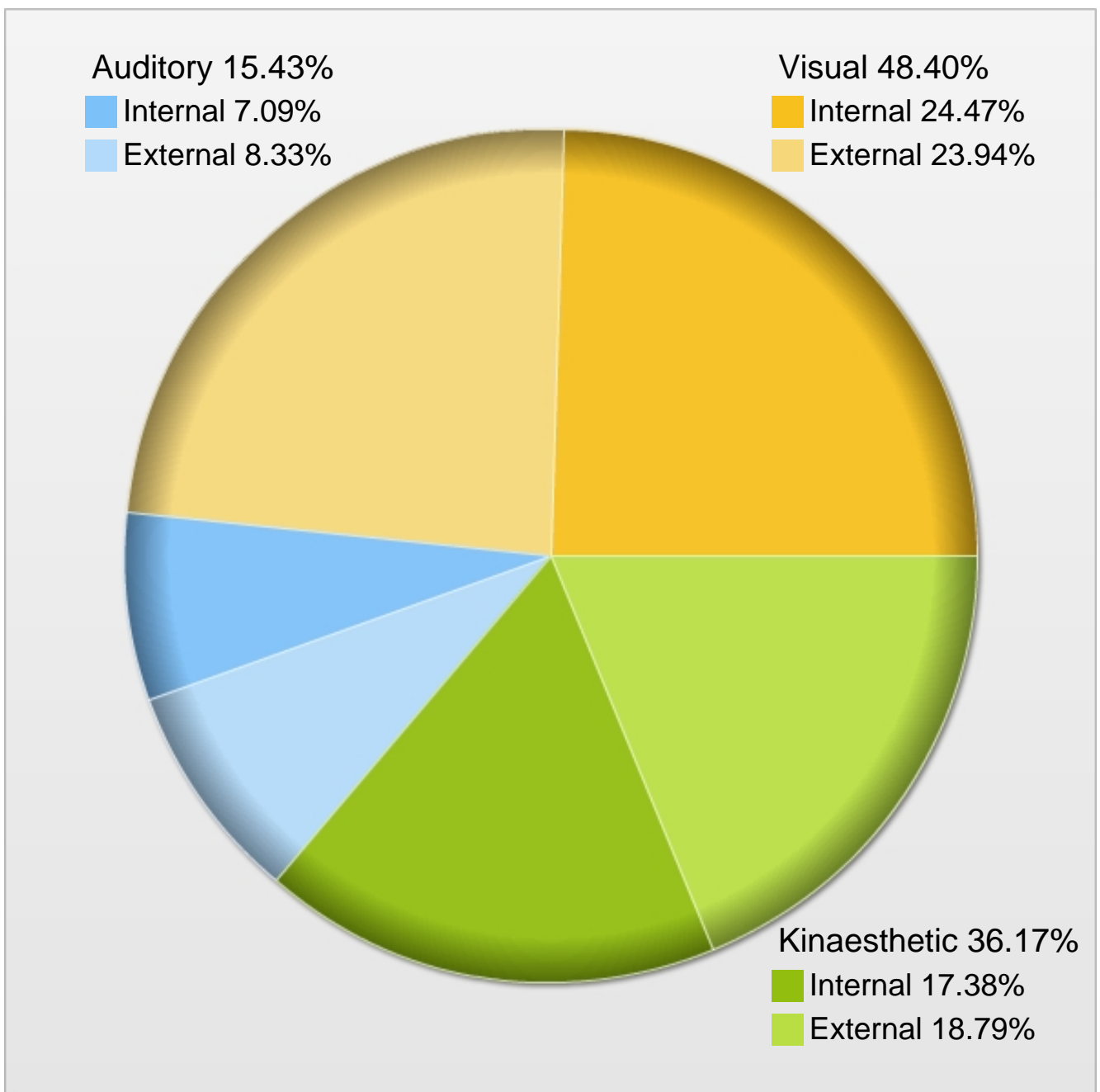
### VISUAL

When someone looks at a word there is more activity in the visual cortex at the back of the brain.



## Your detailed report on personal sensory preference

We each present a distinct profile of the three main senses of seeing, hearing and feeling (or visual, auditory and kinaesthetic) channels. A summary of your headline preferences was detailed on page 4 of this report. The evaluation you completed also allows us to determine how these preferences sub-divide into internal and external components. This gives us a much more detailed analysis of your style. The results, are presented below with a more detailed report on pages 10-21.



## Visual preference evaluation



This score reflects your overall percentage use of the visual sensory preference as reflected by your personal evaluation.

Your percentage is composed of both internal and external visual stimulus. The breakdown of these aspects is detailed below.



People with a preference for communicating or learning in a visual way tend to be people who frequently think in pictures. They can represent images and pictures by one or both of two methods – internal and/or external.

They may imagine such pictures and mental images and construct vivid representations in their 'mind's eye'. This is known as an internal visual preference.

They may also transfer their thoughts to the outside world (through drawing pictures and diagrams) or they may obtain information from the outside world through pictures, colour and diagrams. This is known as an external visual preference.

## Your detailed report on visual sensory preference

### Overall visual preference (48.40% total score)

**External visual  
score**



23.94%

### Visual – external

Your score indicates a HIGH preference for this way of thinking. This means you will seek images or pictures associated with the information being presented to you. For instance, a graph will make more sense to you than pure numbers and statistics. You will also tend to articulate information through this medium too. If you are explaining things, you will find it easier to draw a picture or diagram as you speaking. You may not understand how others do not find this as easy to grasp as you do.



### Visual External

This style prefers visual input to auditory or kinaesthetic input. They generally maintain eye contact in communication and in learning. They tend to use visual terminology in their speech e.g. 'See what I mean?', 'That looks good.' They love handouts, well presented books, diagrams, colour, art and photos. Often observant, they will see details which others do not and can be affected, positively or negatively by their physical surroundings more than others.

Recommendations for enhancing this preference:

- Colour code your handouts.
- Allow time for observation.
- Create illustrations or pictures to represent your learning.
- Use video to record your actions or presentations to learn from them.

## Your detailed report on visual sensory preference

### Overall visual preference (48.40%total score)

**Internal visual  
score**



24.47%

### Visual – internal

Your score indicates a HIGH preference for this way of thinking. This means that you will tend to create pictures or images in your 'mind's eye' when thinking of a subject. These pictures will be vivid in nature and be absolutely clear to you. This type of thinking allows you to imagine events or subject matter before they happen or exist and so can be very creative. Information that is personal and emotionally engaging to you will conjure up these images for you.



### Visual Internal

This style of learner prefers to 'see it' in the 'mind's eye' first. They visualise a mental picture of a subject to help them to understand it. They tend to daydream, imagine and visualise in their minds. It may be that they construct a picture in considerable detail before actually externalising their thoughts (e.g. drawing them or writing them down).

Recommendations for enhancing this preference:

- Create opportunities to 'retreat' or consider and visualise when processing new information.
- Imagine an outcome or end result before commencing on your work (this process is known as mental rehearsal and is widely used by sportsmen).





## About the visual preference


People with a strong visual preference often have difficulty absorbing information through verbal presentations, regardless of how interesting the presentation may be. Their receptive strength is visual, so providing visual aids to supplement the oral presentation helps them immensely. These can include handouts, pictures, Mind Maps and computer print outs.

Colour is also a useful aid in making communication more effective. Colour code your notes and use highlighters to make key points stand out. Finally, perhaps you could record information through the use of pictures and diagrams. You may also convert the written word into a pictorial form to ensure clarity of understanding.

*Top tips using your style to enhance how you receive and understand information:*

- **Use lots of visual stimuli such as posters and cue cards.**
- **Use peripheral posters placed at slightly above head height.**
- **Make posters or drawings of the learning.**
- **Cover up learning posters and test on the content.**
- **Use and display Memory Maps.**
- **Use lots of visual associations – e.g. draw a picture next to a key word or phrase.**
- **Gain an overview of material by ‘flicking’ through book before actually reading it.**
- **Use colour and highlighter pens to accentuate key points.**
- **Use different coloured ink to record notes about different subject issues.**

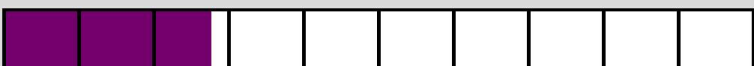
## Auditory preference evaluation

**Overall auditory score**  15.43%

This score reflects your overall percentage use of the auditory sensory preference as reflected by your personal evaluation.

Your percentage is composed of both internal and external auditory stimulus. The breakdown of these aspects is detailed below.

**Internal auditory score**  7.09%

**External auditory score**  8.33%



People with a preference for communicating or learning in an auditory way are people who usually respond well to words. They can absorb or respond to words by one or both of two methods – internal and/or external.

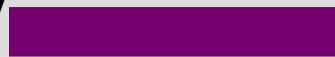
They may wish to read words via books, e-mails or some other form of text. This is part of an internal auditory preference as in the process of reading there is a 'voice in the head' which 'reads'.

They may also want to obtain words through conversation, talking or listening to an external source such as tapes/CDs. This is known as an external auditory preference.

## Your detailed report on auditory sensory preference

### Overall auditory preference (15.43% total score)

**External auditory  
score**



8.33%

### **Auditory – external**

Your score indicates a LOW preference for this way of thinking. This means that you may not need to talk learning through with others to understand a given subject but prefer to think things through alone. You may also not necessarily need to hear the information presented to you; you may instead seek an alternative way of obtaining the information. For you, speech may actually get in the way of your understanding of a subject.



### **Auditory External**

This style prefers auditory input over visual and kinaesthetic. People with this preference can talk constantly to themselves or others. They like to answer rhetorical questions and often replay conversations in their head. They like class discussions, like to read aloud, enjoy storytelling and remember what was discussed.

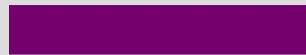
Recommendations for enhancing this preference:

- Read aloud so you can hear your own words.
- Use tape recorders / MP3s to recall information.
- Discuss learning with others.
- Deliver information by talking it through to others or presenting it to them.

## Your detailed report on auditory sensory preference

### Overall auditory preference (15.43% total score)

**Internal auditory  
score**



7.09%

### **Auditory – internal**

Your score indicates a LOW preference for this way of thinking. This means you will struggle to recall sounds or speech patterns when thinking of a given subject. You may not like reading text books and will probably seek another way of obtaining information. You may not be that reflective in nature and might prefer a more active and involved way of obtaining information or learning. If you have to use text books, create many short learning sessions rather than fewer longer ones.



### **Auditory Internal**

This style of learner usually carries on internal dialogues with themselves. ‘What do I know? What do I think about this? What does this mean to me?’

Reading is often important to them – but silently, alone, as this is more effective for them than interactive learning styles or working together with others.

Recommendations for enhancing this preference:

- Write instructions for themselves.
- Create opportunities to be alone in order to reflect when processing new information.
- Be aware of the ‘self-talk’ used and replace, where possible, negative self-talk (I can’t) with positive self-talk (I can).





## About the auditory preference

People with a strong auditory preference really enjoy discussion and well crafted lectures. A stimulated adult auditory learner can listen to an informed teacher speak for a considerable time and retain the information well. They often enjoy 'playing with' words in puns or mnemonics. Their expressive strength is often through oral and written formats. They tend to be effective communicators. This group constitutes what we know as 'traditional' learners. They like a quiet work environment with the ability to focus on one thing at a time. They tend not to like too much group activity nor hands on projects. They prefer to work with one or two other people as this will allow them to talk about the information and listen to the views of others.

*Top tips using your style to enhance how you receive and understand information:*

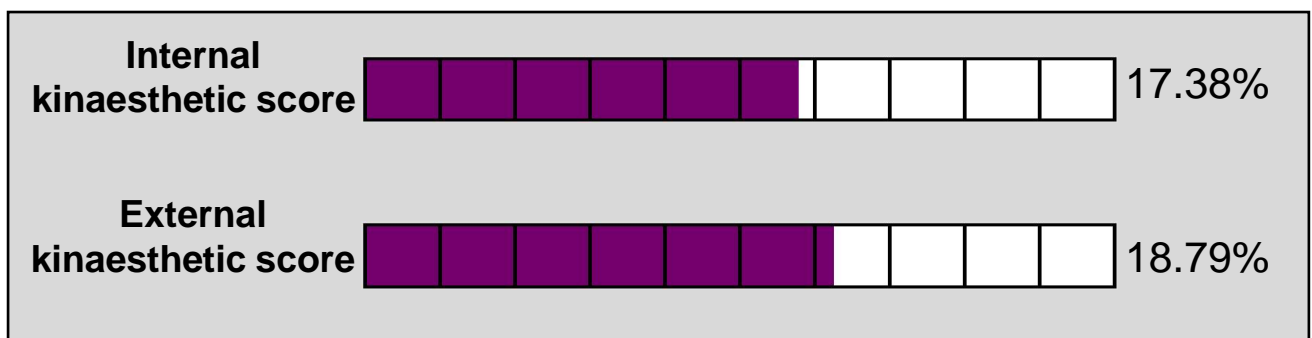
- ***Talk through your learning aloud.***
- ***Put your key learning into a story or narrative of some kind.***
- ***Read your story/narrative out loud.***
- ***Use singing, chanting or verse.***
- ***Design a Memory Map and talk it through with others.***
- ***Discuss the contents of a book, narrative or text.***
- ***Use background music (if appropriate).***
- ***Record your notes onto a tape-recorder or MP3 player and play this back to yourself.***
- ***Use different voices to remember words: the more quirky or novel, the better.***

## Kinaesthetic preference evaluation



This score reflects your overall percentage use of the kinaesthetic sensory preference as reflected by your personal evaluation.

Your percentage is composed of both internal and external kinaesthetic stimulus. The breakdown of these aspects is detailed below.



People with a preference for communicating or learning in a kinaesthetic way, are frequently people who need either physical movement or real life experiences to absorb and retain the information presented. They tend to do this by one of two methods – internal and/or external.

They can desire physical contact or some form of action or involvement - external kinaesthetic preference.

Or they may desire an emotional connection with the material. This is known as an internal kinaesthetic preference.

## Your detailed report on kinaesthetic sensory preference

**Overall kinaesthetic preference (36.17% total score)**

**External kinaesthetic  
score**



18.79%

### Kinaesthetic – external

Your score indicates a MEDIUM preference for this way of thinking. This means you will need to have involvement or activity during the communication or learning process but you will tend to do this in conjunction with another thinking style. You will have a reasonably short concentration span if there is no involvement for you. Indeed, if there is no involvement, you will probably seek to do something such as take notes, draw, scribble or doodle depending on your other preferences.

### Kinaesthetic External (Tactile)



This style prefers physical input. They learn best by action. This means learning by actively doing the task is more interesting than reading about it or hearing about it. They like to manipulate objects and do things whilst they learn. They like to be actively involved with the learning process.

Recommendations for enhancing this preference:

- Use real experiences to enhance your learning.
- Use activities within your learning process and seek out opportunities that are designed to be interactive.
- Use games and activities to learn.

## Your detailed report on kinaesthetic sensory preference

### Overall kinaesthetic preference (36.17% total score)

**Internal  
kinaesthetic score**



17.38%

### **Kinaesthetic – internal**

Your score indicates a MEDIUM preference for this way of thinking. This means you will tend to seek an emotional connection with information and you will tend to do this in conjunction with another thinking style. You will use your intuition to make decisions based in line with information provided by your other preferred style or styles. You will look for congruence between what a person does or says and the emotions that they portray. Without such a link, you will not find them credible.



### **Kinaesthetic Internal**

This style of learner prefers inferential, intuitive input such as storytelling and films (UK) / movies (US). Strong non-verbal communication is valued. This style of learning needs to have positive feelings about the subject before they can get totally engaged. They place greater emphasis on how something is said rather than what is actually said.

Recommendations for enhancing this preference:

- Be aware of your feelings when being confronted with new information. You can impact them rather than just being impacted by them.
- Try to ensure that your emotional response is a positive one if you want to remember the information presented.
- Seek learning opportunities that will make you feel good.





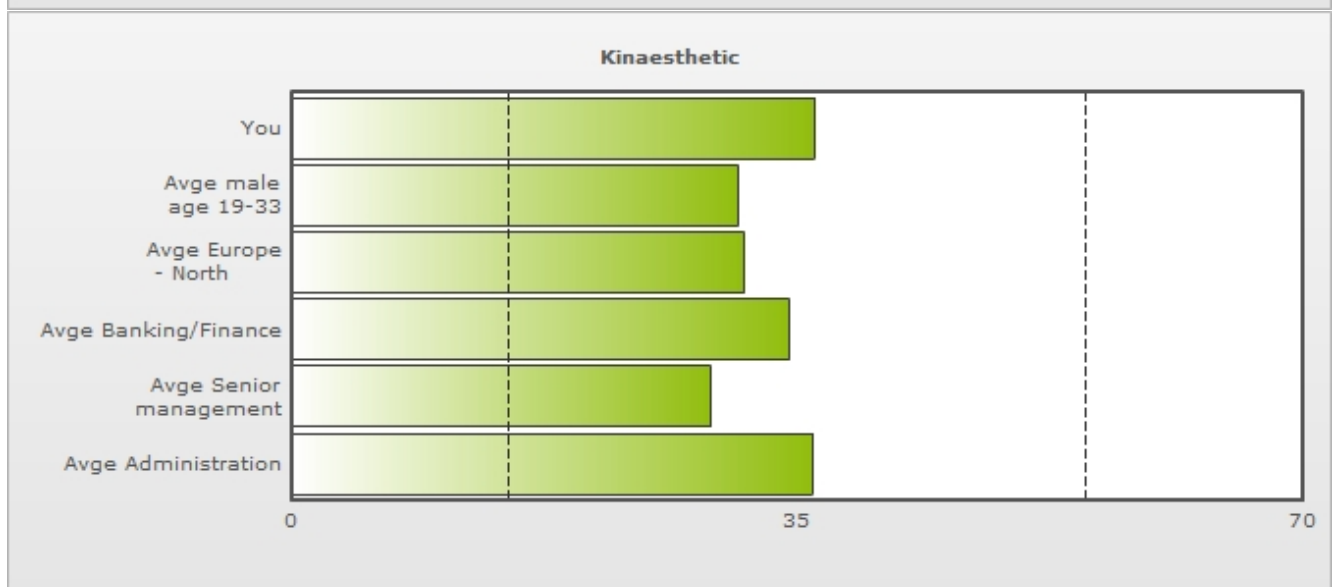
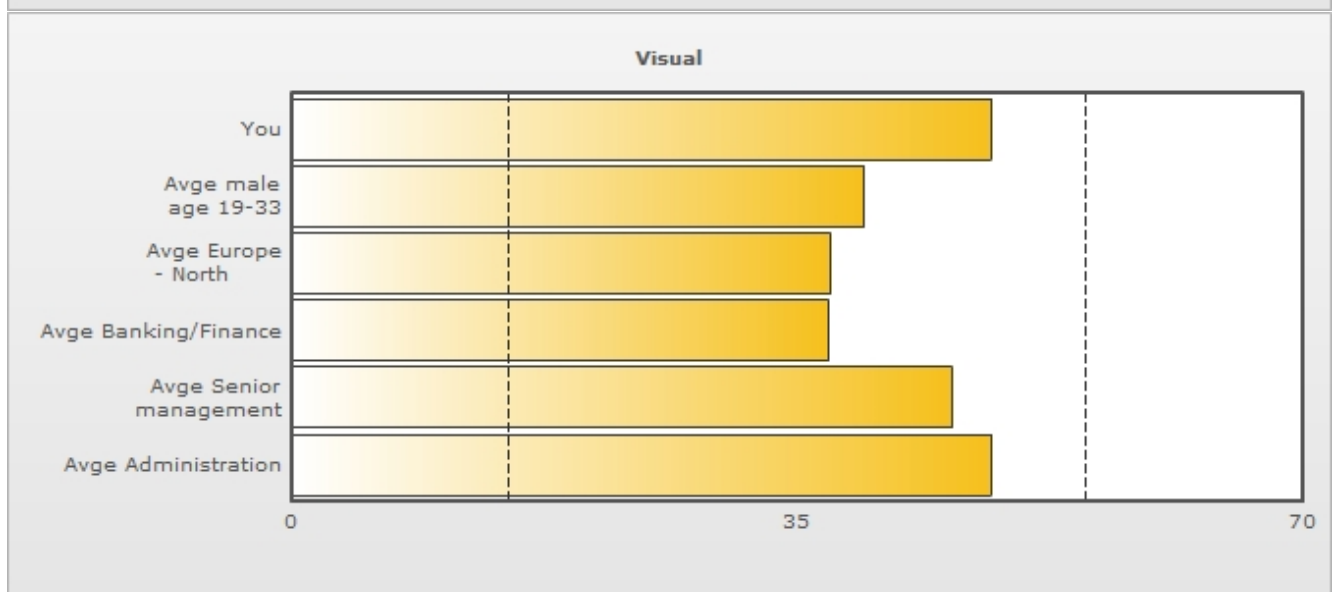
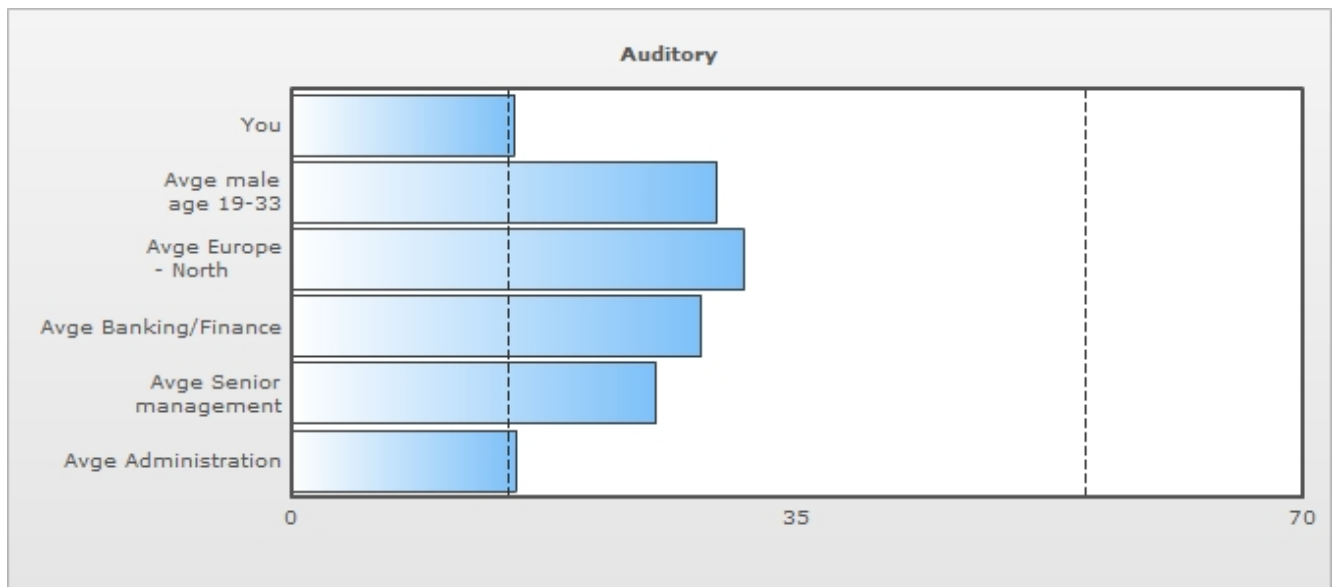
## About the kinaesthetic preference

The two most important things to remember about people with a strong kinaesthetic preference is that they tend to move frequently throughout the day and that they learn best with involvement and hands-on activities. Of the three learning styles, sitting still for long periods and listening to a lecture is hardest for kinaesthetic learners. They like to keep active and can appear to have abundant energy. They may be fervent note takers as this keeps them actively involved in the learning process. If not, they may be doing something else such as scribbling, doodling or drawing as they listen. They often have a limited concentration span and their focus tends to waver after about 20 minutes. This means that when they are involved in any debate, they will respond well if it punctuated with activities and interactive sessions.

*Top tips using your style to enhance how you receive and understand information:*

- ***Build in lots of physical breaks.***
- ***Use different sites for different activities.***
- ***Use a warm-up activity prior to your focused communication.***
- ***Use activities that involve doing something – e.g. placing Post-Its in a pre-determined sequence.***
- ***Use laminated keywords and flash cards to help you remember key points.***
- ***Use movement when learning or trying to understand something – e.g. walk about when you are reading.***
- ***Re-create learning models e.g. memory maps.***
- ***Walk through the key elements of communication – e.g. place cards on a floor and when you stand on them, provide an account of what they mean.***

## How your style compares to others



## Spotting the preferences of others

### External visual

People with these preferences:

- Remember and understand best through watching.
- Need visual stimulation.
- Colour enhances recall.
- Like pictures, mind maps and diagrams.
- Use 'visual' language (e.g. 'that looks right').

### Internal visual

People with these preferences:

- Usually have a strong imagination.
- Remember through visualising.
- 'See' information internally incorporating pictures or colours.

### External auditory

People with these preferences:

- Can remember what they hear.
- Are good listeners.
- Like lectures and oral instructions.
- Like to interact verbally.
- Use auditory language (e.g. 'that sounds right')

### Internal auditory

People with these preferences:

- Often talk to themselves when dealing with something difficult.
- Have frequent inner dialogues that help them remember and understand new concepts.

### External kinaesthetic

People with these preferences:

- Prefer a hands on approach.
- Like to be actively involved.
- Learn best through physical experience.
- Solve problems by doing.
- May have high energy levels.
- Use kinaesthetic language (e.g. 'that feels right')

### Internal kinaesthetic

People with these preferences:

- Like to rely on their strong emotions and feelings.
- Need to feel positive about the subject to fully grasp it.
- Remember best when the information feels right.

## Spotting the preferences of others

This can be done by listening to the language people use. The way that they habitually express themselves provides quite a firm indication of their sensory preferences. Examples of these are:



**People with a high visual preference will typically say:**

*'I see now'*  
*'I get the picture'*  
*'That looks right to me'*  
*'I can picture that'*  
*'I need to get it into perspective'*



**People with a high auditory preference will typically say:**

*'That sounds right'*  
*'I hear what you say'*  
*'That rings a bell'*  
*'Suddenly it clicked'*  
*'Something tells me that's the answer'*



**People with a high kinaesthetic preference will typically say:**

*'That feels right'*  
*'I'm groping for an answer'*  
*'I find it difficult to handle'*  
*'That feels good to me'*  
*'Give me a concrete example'*

Having listened to what people say and gained an indication of their preferences and how to communicate with them, you may have to adapt your approach to them may have to be different from your own natural style.

## Spotting the preferences of others

You may also consider their preference by using a more subtle approach. Observe their body language and listen to their speech. The following traits are common:



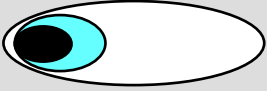
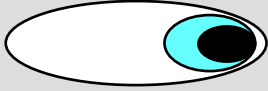
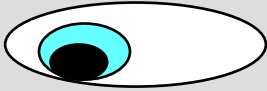
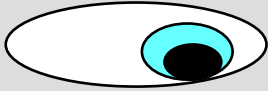
	<b>Visual</b>	<b>Auditory</b>	<b>Kinaesthetic</b>
Breathing	Tends to be shallow in the upper chest	Tends to be in the mid-chest	Tends to be very full using the lower stomach
Posture	Tends to tense shoulders with the neck hunched	Tension is evenly distributed over shoulders and back. Head is often to one side	Generally relaxed posture
Voice	Characteristically rapid speech	Even pace, good clear enunciation	Slower speech, longer pauses, deeper pitch

Reference: Knight, S (1997) NLP at work, Nicholas Brearley Publishing



## Eye movement and sensory preference

When we think in different ways, our eyes can move in distinct directions. It is important to note that it is the last movement you see before they return to their normal position that is important. The pictures are depicted as if you are facing the subject.

 <p><b>Visual Constructed</b></p> <p>Looking up and to the right (observer's left) is where your eyes usually go to create new images</p>	 <p><b>Visual Remembered</b></p> <p>Looking up and to the left (observer's right) allows access to stored pictures</p>
 <p><b>Auditory Constructed</b></p> <p>Eyes go off to the right to create new sounds</p>	 <p><b>Auditory Remembered</b></p> <p>Eyes go to the left to access stored sounds (what was said or heard)</p>
 <p><b>Kinaesthetic</b></p> <p>Experiencing feelings – eyes go down and to the right</p>	 <p><b>Internal Dialogue</b></p> <p>Talking to yourself – eyes most commonly move downward and to the left</p>

Given a right handed person, you will find that their eyes will tend to follow this pattern. Psychologists have found that these eye movement clues hold true in virtually every culture in Europe, Africa and America (although for some obscure reason the Basque people of Southern France and Northern Spain do not typically respond in this way!). Left handed people usually tend to have a response that is the reverse of right handed ones.

Reference:

O'Connor, J and Seymour, J (1994) Training with NLP, Thorsons Publishing

## Eye movement and sensory preference

To calibrate how another thinks in line with this theory, ask them the following questions:

Question	Thought process	Response
When did you last see the King / Queen / President on TV?	Subject recalls an actual image	Visual recall – eyes move up and to your right
Can you picture an elephant riding a bicycle?	Subject constructs an image they have never seen before	Visual construct – eyes move up and to your left
What is your favourite tune – how does it start?	Subject recalls an actual sound	Auditory recall – eyes move sideways to your right
Can you imagine the sound of a bath running whilst your telephone is ringing?	Subject constructs a sound they have probably not heard before	Auditory construct – eyes move sideways and to your left
Think of how you would present an argument to friends at a dinner party?	Subject is holding an internal conversation or dialogue with themselves	Auditory dialogue – eyes move down and to your right
How does it feel when you stroke a cat?	Subject recalls an actual sensation – a kinaesthetic experience	Kinaesthetic – eyes move down and to your left

### Determining another person's preferences

To help ascertain another's sensory preference, watch the dominant movement of their eyes when you talk to them. If their eyes move upwards a lot when they are thinking, they will probably have a visual preference. If their eyes move sideways a lot when they are thinking they will probably have an auditory preference. If their eyes move down a lot when they are thinking, they will probably be a kinaesthetic person. This is not guaranteed accurate, but can give a good initial indication.

## Summary



Hopefully this report has been both fascinating and engaging for you. Identifying and understanding all of the implications of your sensory preference – and that of others – opens a door to both improved performance and more enriching experiences in all aspects of your life.

You will be able to absorb information faster and more easily. You will be able to identify and appreciate the way that those around you prefer to receive information.

You will be able to communicate with them in a more effective way and boost your rapport with them. You will be able to get on the same wavelength as people who, previously, you might not have understood and who never seemed to understand you.

We wish you the best of luck in applying your learning and gaining real value from it.

EvaluationStore.Com was formed to provide a service of high quality evaluation processes that were astoundingly good value for money and that added immediate value in terms of information.

The core principles within every diagnostic offered are:

- Excellent value for money.
- Easy to use.
- High quality.
- Instantly usable.
- Consistent in approach.
- Reliable and valid.



**Are you set up for success?**

**Evaluate your organisation**

**Organisational evaluations** such as strategy and culture can be completed



**How effective is your team?**

**Evaluate your team**

**Team evaluations** can be set to combine the opinions of all team members and the results can be obtained with a simple click



**Are you achieving your potential?**

**Evaluate yourself or others**

**Individual evaluations:** from your learning, to your deep set values, to the behaviours and interactions you have with other people - all can give ideas to increase your personal effectiveness



# Sensory Preference Evaluation