



# ***Genetic Brain Organisation Profile***

CONFIDENTIAL

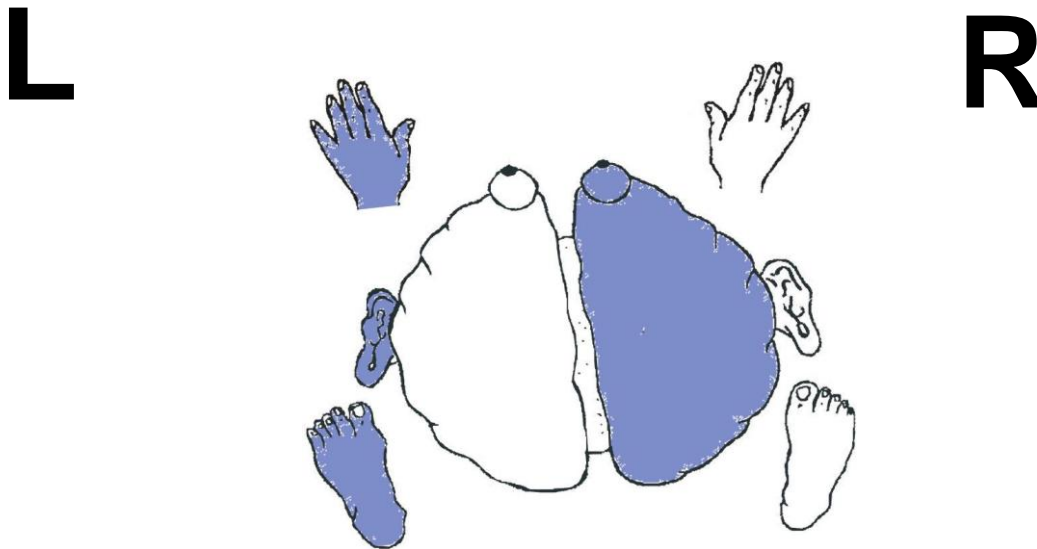
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## 1. Genetic Brain Organisation Profile

Visually the *Genetic Brain Organisation Profile* presents as follows:

**PROFILE NN:** Gestalt / Mixed



## 2. Dominance checks

The dominance patterns were observed with the intention of eliciting the individual's genetic profile. The profile indicates the preferred cognitive and operational functioning under normal circumstances and the predicted compensations during stress. The NN Profile has right brain hemisphere dominance. Both the expressive modalities (hand and foot) function from the dominant hemisphere, as well as the receptive ear. The sole modality controlled by the non-dominant left hemisphere is the eye.

MODALITY	LEFT	RIGHT
Brain Hemisphere		•
Eye		•
Ear	•	
Hand	•	
Foot	•	

## 1.1 Introduction

It all starts with **you**, consciously and unconsciously! You have decided to make an investment in yourself by discovering more about yourself namely your personal **Brain Organisation Profile (GBP)**! Some of the facts that you will discover might be familiar but we hope that there might be some delightful surprises for you as well – some talent which you might not have utilized yet. Thus you might wonder about the why and how of your GBP.

### **a. Why do we have a GBP?**

The obvious reason why all humans are programmed with a GBP is for survival purposes, for when in danger so that the body will understand which foot needs to start running first and which arm will respond impulsively in defending yourself. Therefore we also assist in giving advice related to how your success in specific sport!

### **b. Why should you understand your GBP?**

Your GBP is established at conception, innately programming the way in which you do, hear, see, approach, perceive and react to people and specific situations. This information can assist you to plan for such and be aware of the factors that will cause you to

- Approach your work in a specific way
- Like or dislike certain tasks
- Have certain perceptions
- Stress or be apprehensive in specific situations or around certain people
- Prefer certain hobbies, activities and social situations
- Prefer to be alone or happier surrounded by other people
- Make certain mistakes unconsciously
- Be at risk in certain relationships; therefore understand how and why you might sometimes be manipulated making you vulnerable and sensitive or even to react in an aggressive manner!

*The ultimate aim* for understanding your GBP is to in your ideal career use your potential sensitivities as a strength! Once we have established your GBP we can assist you in giving you the criteria of how you would like to interact with others at work, how you should operationally be involved in tasks and how you would come across emotionally!

### **c. When should I assess my GBP?**

Ideally in the perfect world we would like to establish the GBP already at age 3 in order to proactively enable awareness of potential learning challenges, while at the same time establishing physical, emotional, cognitive and intellectual potential.

Key interventions where the GBP will assist in decisions will be:

- Before going to pre-school
- To establish - School readiness
- Before making - Subject choices

- Before making - Career choices and considering promotional prospects
- Life choices (relationship, lifestyle, hobbies and relaxation options)

## **2.1 Brain hemisphere dominance**

The dominant brain hemisphere was determined by predominant deltoid resistance indicated by muscle checking. Dominance was identified in the right hemisphere of the brain.

- Unconscious actions (you sometimes react without thinking)
- Instinctive
- Impulsive
- Simultaneous
- Gestalt
- Visio – spatial (you like to see pictures)
- Feeling (sometimes you react based on a feeling rather than concrete facts)

## **2.2 Eye dominance**

The eye dominance was determined via the Straight-Arm eye test; and was confirmed by predominant deltoid resistance indicated by muscle checking. Dominance was identified in the right eye.

- Tracks from left to right
- Fine motor movements are normally acceptable
- You pay attention to detail
- You tend to prefer linear forms
- You tend to prefer symmetry
- You prefer working with systems
- You have foresight
- You prefer things to be visually organised

## **2.3 Ear dominance**

The ear dominance was determined through predominant deltoid resistance indicated by muscle checking. Dominance was identified in the left ear. This implies:

- You tend to use figurative language
- You are able to detect rhythm
- This is the sensitive ear, which is sensitive to others' tone of voice
- Sympathetic ear
- You hear emotional intonations
- You tend to build sounds into words

## 2.4 Hand dominance

The dominant hand was identified by predominant deltoid resistance established via muscle checking. The left hand was indicated as dominant over the lesser deltoid resistance of the right hand.

- You are likely to be highly verbal
- You will often use poetic or metaphorical communication
- You may experience difficulty with penmanship
- You may show artistic tendencies
- You are likely to find new methods to process tasks

If you make use of your right hand, it is considered to be the *functional* hand. This is *learned* behaviour and implies that the profile is, in fact, ambidextrous.

## 2.5 Foot dominance

The foot dominance was identified by predominant deltoid resistance established via muscle checking. The left foot was identified as being dominant. This implies:

- You have an unstructured, creative approach to problem solving
- You are likely to consistently adopt new approaches to problems
- You tend to avoid confrontation by walking away

Dominance in the left foot also implies natural ability for sports which require change-in-direction foot work. Examples of these sports are hockey, netball and polo. The left foot has natural rhythm and implies ability for dancing and floor work in gymnastics.

***Although genetically dominant traits have been established, it is the combination and interrelatedness of the dominant modalities which determine the uniqueness of the profile.***

### 3. *Dominance profile*

Individuals represented by the NN Profile tend to exhibit the following traits:

- Gregarious
- Quick witted
- Controlled objectivity
- Tough, yet fair
- Efficient
- Logical
- Communicates easily and well
- Seeks challenge
- Strategy oriented
- Tactical

### 4. *Overview*

The NN Profile's major characteristics are those of Gestalt, auditory functioning and open communication. Processing occurs best through listening, doing and communicating what has been seen, heard or learned.

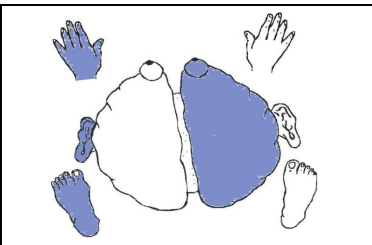
Even though the eye is blocked under stress, it still tracks normally from left to right – thus, no problems are expected with reading or writing, even in stress.

You are a global thinker, but under stress you can have problems seeing the whole picture and may get bogged down with the details.

### 5. *Normal functioning*

Under normal conditions, the inherent strengths, weaknesses or sensitivities and personality traits are exhibited in the way the individual functions. This is based on the premise that no synaptic stress has occurred, and the individual still has full access to both hemispheres of the brain.

The NN Profile's *Genetic Brain Organisation Profile* is shown here again for ease of reference:

	MODALITY	DOMINANCE
	Brain hemisphere	Right
	Eye	Right
	Ear	Left
	Hand	Left
	Foot	Left

Your genetic hemisphere dominance indicates that you prefer a creative, flexible and challenging work environment where you can employ your higher order cognitive skills more so than the skills associated with the left hemisphere.

NN Profiles communicate creatively and perform tasks in creative and innovative ways. You rapidly become bored and frustrated with too much repetition or rigid routine and prefer to do things your own way than follow prescribed methods or procedures.

Your profile generates energy in the brain by accessing external sound, either your own talking or by listening to others. When any of these sources are lacking, you will feel the need to move physically in order to compensate for the lack of internal and/or external resonance.

Profiles with left ears have the ability to sing in groups and compose music because of the sensitivity of the ear. Apart from musical intelligence, your creative / sensitive ear implies a natural bedside manner which should be used to your advantage in your career. Listening patiently and advising others is easy for you. However, be aware that others do not take advantage of this trait and abuse you. When other people sound upset or angry, you may easily be manipulated into agreeing to things you would rather not do, as you are acutely sensitive to their auditory emotion.

The down-side of the creative / sensitive ear is that it has difficulty in hearing detail. You therefore need to be given verbal structure in order to focus your attention. The ear tends to miss detail when instructions etc are given at a slightly higher pitch and tone. Apart from the sensitivity to this pitch and tone, you are also sensitive to tone of voice and the level of ambient noise in your environment. The combination of your left hand / left ear indicates that you are highly verbal.

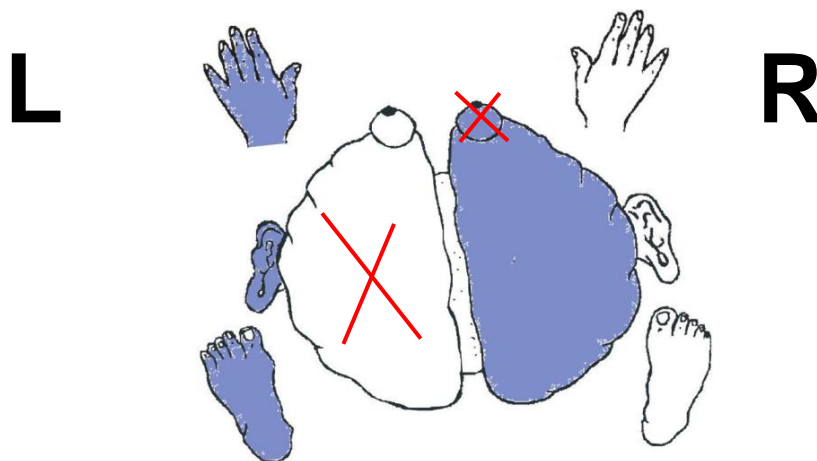
The detail or diagnostic eye implies natural intelligence for mathematical reasoning and other detailed fields such as science, accountancy, and technical drawing. The tracking of the dominant eye is also from left to right, implying no stress on the eye when reading. If your performance in these areas is poor, it is clear that the transfer of information was spoken and undemonstrated. The more visual the explanation, the better and more rapid your understanding is.

The expressive left hand indicates your tendency to be flexible and adaptable to any situation. You also tend to be a 'chatter-box'. You have the ability to change and adjust existing processes and procedures; however this also implies that you will battle to keep to prescribed methods as you prefer to do things your own way. Your creative left foot implies a natural ability for graceful and adept direction-changes in sport and dance.

## **6. *Stress functioning***

Under stressful conditions, access to the non-dominant left brain hemisphere is affected first. The result is that all other dominant modalities controlled by the non-dominant brain hemisphere will also be inhibited. In the case of the NN Profile, only the eye is controlled by the non-dominant hemisphere, which implies that its functioning is affected by stress.

The stress profile is visually represented as follows:



NN Profiles are global thinkers but, under stress, you may be unable to see the big picture. The blockage of the eye indicates that in an exam situation questions may be misread and mistakes and detail will not necessarily be seen. In other stressful situations, you may be inclined to make mistakes with written information.

Because the hand is unaffected, your ability to process normal tasks is unchanged. It is possible that your frustration will be evidenced by a lack of logic in your communication. You will benefit from participating in activities which require hand/ear and rhythmic foot coordination in order to relieve stress and frustration.

You should continuously make others aware of how they sound to check the reason for their negative tone or pitch. Be aware that if you don't, you may incorrectly assume responsibility for how they sound, causing you to stress unnecessarily. If possible you should find a career which makes use of this gentle ear, such as counselling.

From an emotional point of view, the blocked eye during stress implies that you would prefer not to see anyone and would rather have time-out to consider matters. Although this is your preference, your gentle left ear may inhibit your assertiveness to request some privacy. The open foot does allow you to walk away from problems or conflict to consider your approach first.

## **7. Barriers**

- Hearing others being upset or sad causes you to stress
- If you are responsible for making others sound upset or sad, this can be distressing
- Too many repetitive work experiences are frustrating
- Being bored
- Impatience from others
- Possible unfair labelling and treatment from others
- Auditory distractions can reduce your efficiency and productivity
- No verbal rewards, that is someone saying to you "Thank you for..."
- You can find it difficult to say no
- People may abuse your left ear for sympathy and favours



## 8. *Implications*

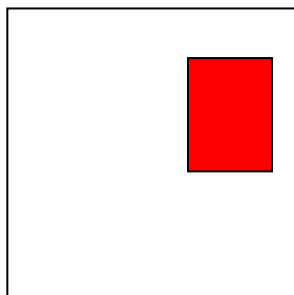
- The auditory, communication and kinaesthetic modalities are always available
- The detailed eye implies intelligence for tasks and processes where detail needs to be seen, but the sensitive ear may mean that an accompanying verbal explanation might be lost
- The dominant eye reads from left to right which implies no stress or dyslexic tendencies
- The visual and problem-solving modalities are inhibited under stress
- You need to hear how others sound before you can relax and focus
- You have a natural tendency to assist and care for others when asked; but be aware that this may get you into trouble if you agree to do things that you would prefer not to do
- You will be more focused and productive in a quiet environment with few auditory distractions
- You tend to interpret language primarily from its emotional elements, like tone and pitch
- You are always sensitive to sound, auditory distractions and tone of voice of others
- You prefer a global approach to an analytical one
- You benefit from fine-motor experiences which emphasise hand/eye coordination and manual dexterity
- Your movements are spontaneous and graceful. You are able to move with good form and precision for structured dance and sports

## 9. *Recommendations*

- You tend to focus on the overview, metaphor, story, dialect and emotional context
- You have a good memory for faces, underlying meanings and whole concepts
- You interpret language primarily from its tone and pitch and can easily decipher the meaning behind the words
- When dealing with visual data you are able to grasp and interpret written data and pictorial information although you prefer not to and can therefore resist this type of learning / working
- When stressed you may have difficulty creating a visual perspective and fail to understand the intention or emotional relevance of the information
- When stressed you may also have difficulty in expressing yourself in a rational way as well as with fine-motor hand/eye coordinated activities such as penmanship
- You appreciate metaphors, associations and examples in order to integrate learning
- You prefer to start a new cognitive task by imagining the end goal or whole context rather than following a step-by-step method
- Your profile needs to hear love!
- You should sit on the right side of an audience

**Ideal position for you to sit in an audience / lecture:**

Front



## **10. The 12 Intelligences**

Although every individual's *Genetic Brain Organisation Profile* indicates that they are born with potential in some of the 12 intelligences, it does not imply that those in-born intelligences have been developed or are utilised to their fullest extent. Upbringing, schooling and environmental factors will determine which of – and to what extent – the intelligences will come to the fore.

### **In-born intelligences exhibited by the NN Profile:**

- Linguistic intelligence – factual
- Visual-spatial intelligence – structured
- Logical mathematical intelligence - conditional
- Musical intelligence – harmonizing and composing
- Bodily-kinaesthetic intelligence – creative
- Naturalistic intelligence
- Interpersonal (social) intelligence – patience and sympathy
- Intra-personal intelligence
- Spiritual intelligence
- Componential intelligence
- Experiential intelligence

### **Intelligences requiring structured experiences for development:**

- Linguistic intelligence – creative
- Visual-spatial intelligence – free design
- Musical intelligence – technical precision
- Bodily-kinaesthetic – structured
- Interpersonal (social) intelligence – assertiveness
- Contextual intelligence

## **11. Profile strengths**

- You enjoy being a leader
- You tend to be direct and to the point
- You expect hard work
- You set high standards
- You enjoy problem solving and will find a unique solution to a problem that others may not discern
- You admires strength in others
- You tend to use helpful critiques
- You tend to be prepared for the unexpected

## **12. *Profile weaknesses***

- “Country Club Manager” as a person – you easily sacrifice yourself for the sake of others
- You tend not to hear spoken detail when you are stressed
- You are always sensitive to tone of voice and noise levels, which means you can be distracted by how something was said rather than what was actually said
- You may miss written detail under stress because of the blocked eye
- You can be manipulated by other peoples’ emotional behaviour
- You can be emotionally draining on others
- You tend to give others what you need yourself

## **13. *Relationship needs***

- You need continuous verbal recognition, i.e. someone saying to you “Thank you for...”
- You will often organise family events
- You see family as part of the career and work system
- You enjoy competitive sports as recreation
- You will usually organise relaxing pastimes
- You expect dedication and commitment from partners

## **14. *Communication style***

- You tend to rely on your “sixth sense”
- You like the benefit of debating an issue
- You have a natural clarity of thought and speech
- You are gifted with insights into language and its meaning

## **15. *Preferred business setting***

- You like working together with others
- You prefer an open and friendly atmosphere
- You need variety and challenge, although some structure is preferable
- You enjoy an upbeat, ideas-oriented work place
- You work best with warm, colourful people
- You like to be valued by others

## **16. *Working in a team***

- You will often lay out a blueprint for success
- You need others to follow through with the implementation
- You will usually accept responsibility for explaining to others

## **17. *Management style***

- You have a 'take charge' attitude
- You work for long term goals and you always have an eye to the future
- You can be decisive and tough
- You usually have priorities and deadlines

## **18. *Career indications***

NN Profiles are the Psychologists and Paediatricians of the world. You should not consider careers where you need to constantly supervise others and reprimand them all the time. This is because if you are responsible for others sounding upset, you may become depressed.

You also have a natural ability for research. This should ideally underpin any career choice. With your natural inclination to talk a lot, it could be worthwhile structuring this skill; consider counselling, therapy, marketing or advertising, advising/ consulting and/or mediation at political and executive levels.

Most of the day you should spend quiet investigative time on your own, with limited sessions to allow your natural bed-side manner to gather information or to give feedback.

Be careful of finding a career with regard to your ear while ignoring your creative brain!

### **18.1 Additional career notes**

Offer assistance in your existing position by:

- Trying to get yourself appointed to strategic planning committees
- Finding a mentor
- Creating opportunities to gain a position of leadership (volunteer to chair a committee)
- Developing a 'critical group of friends'
- Seeking professional development opportunities on a regular basis
- Signing up for advanced training for a degree in your area of speciality
- Inviting your direct-reports to give you more input

## ***19. Attaining & maintaining career satisfaction***

It is important to note that there are successful people of all profiles in all occupations. In this section, specific criteria are highlighted which may not have been previously considered in terms of making the most of your career.

### **PROFILE NN: “EVERYTHING IS FINE, I’M IN CHARGE”**

#### **19.1 Satisfaction is obtained from a career that:**

- Allows you to lead and be in control of organising and perfecting the operating systems of the company so that it runs efficiently and reaches its goals on schedule
- Allows you to engage in long-term strategic planning, creative problem-solving and the generation of innovative and logical approaches to a variety of problems
- Takes place in a well-organised environment where you and others work within a clear and definite set of guidelines
- Challenges and stimulates your intellectual curiosity and allows you to work with complex and difficult problems
- Provides you with opportunities to meet and interact with a variety of other capable, interesting and powerful people
- Allows you opportunities to advance within the organisation and to increase and demonstrate your competence
- Takes place in a quiet, cheerful, cooperative environment where interpersonal conflicts are kept to a minimum
- Provides you with an opportunity to experience inner growth and development within a context of work that you feel is important
- Does not require you to perform regular public speaking, lead a large group of people you don’t know well, or give people negative feedback

#### **19.2 Work-related strengths may include:**

- Your ability to welcome change and adapt well to new situations
- Your sensitivity to people’s needs and the desire to help them in real ways
- Your practicality and realistic perceptions
- Good common sense
- Warmth and generosity
- Your loyalty to people and organisations that you care deeply about
- Your attention to important details; especially those that concern people
- Thoughtfulness and the ability to concentrate on current needs
- A willingness to support organisational goals
- The ability to clearly assess the current situation and see what needs fixing
- Flexibility and the willingness to take calculated risks and try new approaches

### **19.3 Work-related challenges may include:**

- The tendency to accept things at face value and miss deeper implications
- The tendency to take criticism and negative feedback very personally
- A dislike of preparing in advance – you can battle to manage your time
- Difficulty making final decisions and then sticking with them
- A dislike of excessive rules and overly structured bureaucracy
- Difficulty making logical decisions if they conflict with your personal feelings
- Unwillingness to risk disharmony to fight for your position or idea
- The tendency to become overwhelmed by large or highly complex tasks
- Resistance to setting long-term goals and occasional difficulty meeting deadlines
- Difficulty with disciplining direct reports or criticising others

### **19.4 Ways to find a better ‘fit’ with your current job**

- Seek help to resolve any interpersonal conflicts
- Consider taking an assertiveness training class
- Ask supervisors to be clear about their expectations of you
- Find time during the day to ‘recharge’ by yourself
- Do things which will allow you to help, connect with and support co-workers
- Try to ensure there is some variety in your daily activities
- Participate in recreational activities
- Seek others with complementary skills to help evaluate your ideas
- Think about where you want to be five years from now
- Set short-term achievable goals to keep you on track
- Try to find other people in your work environment who share similar interests and values

### **19.5 Pathways to success**

Use your strengths to:

- Consider all data available to you; even that which may contradict your personal feelings
- Look at the ‘hard’ consequences of your actions and decisions. List the pros and cons so that you are sure to consider both the positive and negative aspects
- Develop a method of analysing information before accepting it at face-value
- Assert yourself, step back and consider the big picture, and don’t take things too personally

## **20. Summary**

NN Profiles are hearty and frank in personality. You are capable in studies, leaders in activities and usually good at anything which requires reasoning and intelligent talk. You tend to be well informed and continuously add to your fund of knowledge.

As optimistic people, NN Profiles are often more positive and confident than their past experience in certain areas warrants.

Live your outer life with more thinking and your inner life with more intuition.

*Born to be different!*

Yours sincerely  
Dr Annette Lotter

## ***Appendix: The 12 Intelligences***

The IQ test as we know it today grew out of the work of French Psychologist Alfred Binet, who, in the early years of the 20<sup>th</sup> century, devised a test to identify children, whose learning problems required remedial education. Lewis Terman at Stanford University standardised it to take population norms into account and the test became known as the Stanford-Binet. Terman later incorporated psychologist William Stern's notion of an intelligence quotient. In simple terms, IQ as it is universally recognised, is an individual's mental age, as determined by intelligence testing, divided by the person's chronological age – and the ratio multiplied by 100.

Over the years it has become the standard measure of intelligence while provoking fierce, passionate debate among academics, educators, and the lay public.

There is little doubt that IQ tests are reasonably good at assessing and predicting a pupil's school performance, "... but since intelligence is defined operationally as that which intelligence tests test, the test makers are *"chasing their own tail"*, declares Michael Gazzaniga, director of the Division of Cognitive Neuroscience at Cornell University Medical College.

In other words: intelligence tests measure the ability of people to do well in intelligence tests.

Typically, the IQ test predominantly measures an individual's ability with linguistic and logical-mathematical challenges as well as some visual and spatial tasks.

Enter Harvard professor of education Howard Gardner.

Gardner came up with his *"Theory of Multiple Intelligences"*, which says, in effect, that IQ should not be measured as an absolute figure in the way height, weight, and blood pressure are. It's a crucial blunder, he maintains, to assume that IQ is a single fixed entity that can be measured by a pencil-and-paper test.

*It is not how smart you are, but **how you are smart!*** This also implies that intelligence can vary in different contexts.

In arriving at his theory Gardner embraced ideas from a wide range of disparate sources. Gardner analysed studies of child prodigies, gifted individuals, brain damaged patients, idiots, normal children, normal adults, experts in different lines of work, and individuals from diverse cultures.

In arriving at his theory Gardner embraced ideas derived from neurobiology, complemented by fields such as psychology, anthropology, philosophy, and history.

### **1 Linguistic intelligence:**

The ability to read, write and communicate with words. Authors, journalists, poets, orators and comedians are obvious examples of such people.



**2 Logical-mathematical intelligence:**

*The ability to reason and calculate; to think things through in a logical, systematic manner.*

These are the kind of skills which are highly developed in engineers, scientists, economists, accountants, detectives and members of the legal profession.

**3 Visual-spatial intelligence:**

*The ability to think in pictures, to visualise a future result.*

To imagine things in one's mind's eye. Architects, artists, sculptors, sailors, photographers and strategic planners normally have this type of intelligence. People use it when they have a sense of direction, when they navigate or draw, or when they develop from mind ideas or flowcharts and find new ways of presenting ideas and things.

**4 Musical intelligence:**

*The ability to make or compose music, to sing well, or to understand and appreciate music, to keep rhythm.*

This is a talent obviously enjoyed by musicians, composers, and recording engineers. But most people have a basic musical intelligence that can be developed.

**5 Bodily-kinesthetic intelligence:**

*The ability to use one's body skilfully to solve problems, create products, or present ideas and emotions.*

Obviously this is ability for athletic pursuits, artistic pursuits such as dancing and acting, or building and construction. One can include surgeons in this category, but many people who are physically talented – “good with their hands” – don't recognise that this form of intelligence as being of equal value to the others.

**6 Naturalistic intelligence:**

*The ability to recognise flora and fauna, to make other consequential distinctions in the natural world, and to use this ability productive.*

For example: hunting, farming, or biological science. Farmers, botanists, conservationists, biologists, environmentalists and zoologists fit into this category.

**7 Inter-personal (social) intelligence:**

*The ability to work effectively with others, to relate to other people and display empathy and understanding, to notice their motivations and goals.*

This is a vital human intelligence exhibited by good teachers, facilitators, therapists, politicians, religious leaders, and salespeople.

## **8 Intra-personal intelligence:**

*The ability for self-analysis and reflection.*

To be able to quietly contemplate and assess one's accomplishments, to review one's behaviour and innermost feelings, to make plans and set goals, to know oneself objectively. Philosophers, counsellors and many peak performers in all fields fit into this category.

## **9 Spiritual intelligence:**

*The ability to appreciate and accommodate views and opinions from people of other spiritual denominations.*

Gardner admits that the mental abilities most valued in the western world are linguistic and logical-mathematical intelligences. Gardner notes, however, that the importance of these nine intelligences has shifted over time, and varies from culture to culture. In a hunting society, for example, it is a lot more important to have extremely good control of your body (bodily-kinesthetic intelligence) and know your way around (spatial intelligence) than to add and subtract quickly. In Japanese society, the ability to work cooperatively in groups and to arrive at joint decisions (interpersonal intelligence) is highly valued. Whereas schools in the first 50 years or so of this century focused on linguistic and mathematical skills, Gardner (1983) speculated that linguistic abilities would become less important in schools in the near future as logical-mathematical abilities become more important related to technological and IT development.

The point is, while both logical-mathematical and linguistic intelligences are important today, it will not always be that way. Hence, Gardner's argument is that we need to be sensitive to the fact that what is valued as far as "intelligences" is concerned is changeable, something we need to keep in mind as we plan curriculums and teach students. Annette Lotter (1985) has offered a view of mental abilities that questions the common assumptions that "smart is fast". This assumption underlies the overwhelming majority of IQ and aptitude tests, but is one that overlooks the evidence suggesting that smartness is not always associated with quickness.

First, it is well documented that a reflective rather than an impulsive style of problem solving tends to be associated with higher ability to solve problems (Baron 1982). Jumping to conclusions without adequate reflection can lead to false starts or erroneous thinking. How often, for example, do our snap judgments turn out to be poor ones, if not wrong ones? Yet, the vast majority of intelligence tests are timed, which forces the taker into an impulsive mode.

Second, research suggest that persons who are more highly intelligent tend to spend relatively more time than less intelligent persons on global, higher-order planning, and less time on local, problem-specific planning (Mulholland, Pellegrino, and Glaser 1980, Lotter 1981). Brighter people tend to be more reflective in their efforts to understand the terms and parameters of a problem the do less bright ones, something that takes more time, not less.

Finally, in a study which individuals were free to spend as long as they liked in solving insight problems, quite a high correlation, .75 (1.00 is a perfect correlation), was found between time spent on the problems and measured IQ (Lotter and Walpy 1982). These findings suggest that more able individuals do not easily give up when confronted with problems, and that persistence and involvement are highly related not only to successful outcomes, but to higher IQ's. For Dr

Lotter, the critical aspect of what constitutes “intelligence” is not necessarily the speed with which one arrives at a solution, but the processes one uses to get there.

Thus, Lotter, (1985) also suggests a “triarchic theory of intelligence” in agreement with Sternberg, based on research centering around the influence of context, upbringing and environment (1983 – 1985). This is a point of view that says there are different ways to be smart and that processing information quickly does not mean it was done accurately or correctly. Sternberg (1985) theorised that there are three aspects of intelligence: componential, experiential and contextual.

## **10 Componential intelligence:**

*The ability to reason logically and objectively.*

Componential intelligence is that facet of people’s mental ability that enables them to reason logically, to think analytically, to identify connections among ideas, and to see various aspects or “components” of a problem. It is the type of intelligence typically associated with people who do well on achievement and IQ tests. People with high componential intelligence might do quite well on multiple-choice or true-false tests, and might be especially skilled at critiquing and analyzing arguments. This is one kind of intelligence, but not the only one. As observed by Lotter: “Many people are very good analytically, but they just don’t have good ideas of their own”.

## **11 Experiential intelligence:**

*The ability to think and solve challenges with new and ingenious solutions.*

Experiential intelligence is a facet of mental ability associated with a person’s capacity to combine disparate experiences in insightful ways. People high in this type of intelligence may not have the best test scores, but they are able to come up with creative and ingenious ways for seeing new combinations and possibilities in the world around them.

Lotter concluded from her research that experiential intelligence consists of three types of insight: selective encoding, selective combination and selective comparison. Experiential intelligence then is the capacity to not only make sense of our own experiences, but to reorder, recombine, and reinterpret our experiences in new and possible creative ways.

## **12 Contextual or practical intelligence**

*The ability to use practical common sense in solving challenges.*

People use this type of intelligence in the context of their external world. It is one’s practical intelligence or common sense, which might be loosely be defined as all of the really important things they never teach you in school. In Lotter’s view, there are many people who do not do particularly well on tests, but who are extremely intelligent in a practical sense. Although this kind of intelligence does not fit the usual academic world, it is nevertheless intelligence, and as such, Lotter feels it should be considered along with all other expressions of human mental abilities.