



## ***Genetic Brain Organisation Profile***

**CONFIDENTIAL**

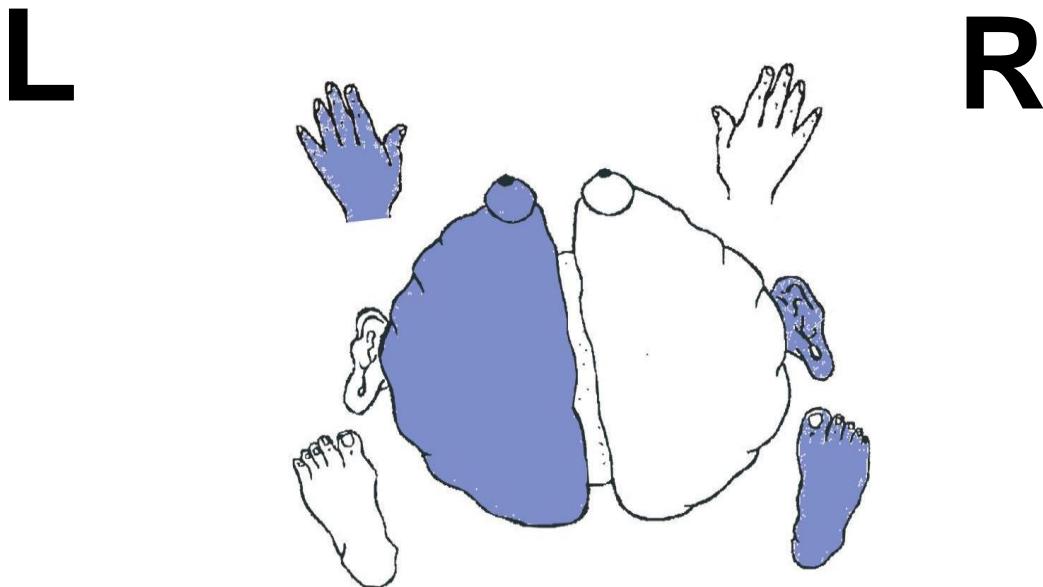
Web: [www.eduprofile.co.za](http://www.eduprofile.co.za)

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## 1. ***Genetic Brain Organisation Profile***

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

**PROFILE G:** Linear / 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 G profile has left brain hemisphere dominance. In addition, the ear and foot modalities are also controlled by the dominant left hemisphere. The eye and hand modalities are controlled by the non-dominant right hemisphere.

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 left hemisphere of the brain. This implies:

- Conscious reaction (you generally think before you react)
- Purposeful
- Compulsive rather than impulsive
- Sequential thinking
- Linear thinking
- Auditory analytical (you analyse the details in what you hear)
- Visio – focal (you prefer to see pictures rather than simply being told information)

## 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 left eye.

- Tracks from right to left
- Gross motor movements
- Sees the 'big picture'
- Spatial
- Shape
- Colour
- Distance
- Hindsight
- Sensitive to visual movement

## 2.3 Ear dominance

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

- You tend to interpret language literally
- You do not usually pick up the meaning within covert speech
- You remember the detail in conversations and discussions
- Your language tends to be analytical
- You hear the facts, rather than the emotions
- You tend to be an impatient listener
- You are prone to interrupt others or daydream if you feel that they are becoming 'long-winded'
- Breaks sound into small bits
- Hears the melodic line

## 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.

- Highly verbal
- Poetic or metaphorical communication
- Can experience difficulty with penmanship
- Artistic tendencies
- 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 right foot was identified as being dominant. This implies:

- You have a structured approach to problem solving
- You are likely to consistently approach problems from the same angle
- You will tend to use tried-and-tested methods or procedures to solve problems
- You tend to meet conflict or confrontation head-on

Dominance in the right foot also implies natural ability for sports which require straight-line foot technique. Examples of these sports are: athletics, swimming, cycling, gymnastics (bar and horse work) and equestrian sports.

***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 G Profile tend to exhibit the following traits:

- Charismatic
- Has a zest for life
- Insightful
- Dynamic
- Spontaneous
- Energetic and enthusiastic
- Authentic
- Intuitive with people
- Versatile
- Imaginative

### 4. Overview

The G Profile's major attributes are logic and auditory access. You understand best by hearing the information, but you can experience difficulty in maintain eye contact with the speaker. Logically communicating information can be a challenge.

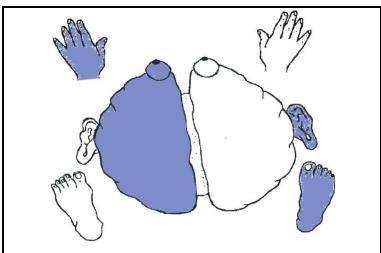
The sensitive left eye physiologically prefers to track from right to left. This may result in tiredness if much reading is required. There is also the potential for letter and number reversals or transpositions when dealing with highly detailed text.

The G Profile processes information best by closing their eyes and turning their dominant right ear toward the source of auditory information.

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



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

The G Profile processes visual information in the right (gestalt) hemisphere. However, the auditory modality functions from the dominant left hemisphere. Thus, processing occurs naturally in both sides of the brain. Because it is always available, the dominant ear constantly

absorbs and processes information. This profile is highly verbal, although it can have difficulty in seeing the specifics and keeping the big picture in mind.

The genetically dominant left eye tracks from right to left. This can result in tiredness when reading large volumes of text. It may also miss written detail, and letter and number transpositions are possible. However, the left eye has exquisite intelligence to visualise and conceptualise innovative ideas. It also has wonderful artistic and design ability. Be aware that the left eye is also acutely sensitive to the body language and facial expression of other people. The G Profile can incorrectly assume responsibility when others appear to be unhappy or angry. You can easily feel intimidated.

The left eye is also sensitive to movement going on in the environment and aesthetically pleasing objects. It therefore has the tendency to become distracted and scan the surroundings for something to day-dream about or visualise. This can lead to difficulty in maintaining eye contact with a speaker, if it is required for a lengthy period. To assist the eye in remaining focused, work areas should therefore be uncluttered and free of visual distractions. Try note-taking as a trick to focus your attention.

G Profiles need to ‘see love’. It is highly beneficial to your emotional state and level of motivation if you witness happy reactions from other people due to your effort. Visual recognition such as notes, cards, emails, flowers etc has a much more profound effect on you than verbal praise. Keep in mind that you are vulnerable to manipulation of others, and you may therefore tend to accept tasks or to carry out favours that you would prefer not to.

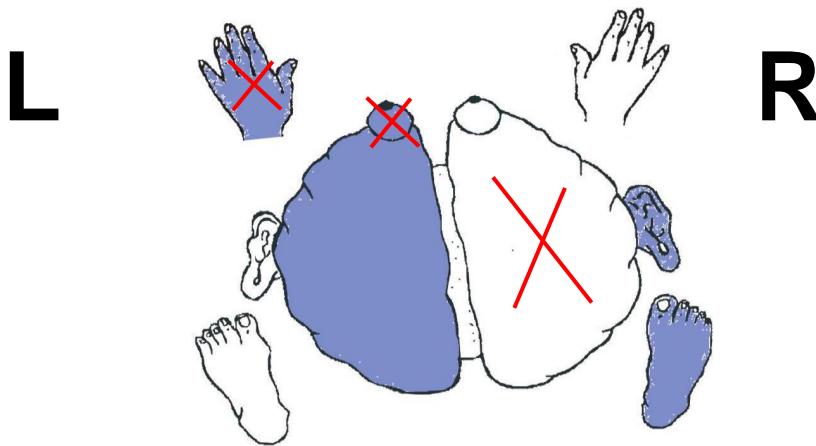
The detail right ear of the G Profile hears information quickly. During long-winded discussions, the ear may become bored which will ultimately lead to the creative/sensitive eye finding something to look at – the structured ear gets the creative eye into trouble!

The expressive hand modality functions from the creative right hemisphere; this implies that you are flexible and adaptable. The foot modality is controlled by the structured left brain hemisphere. This implies the ability to plan, organise and structure information and processes easily, as well as to problem solve and resolve conflict.

## **6. Stress functioning**

Under stressful conditions, access to the non-dominant right 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 G Profile, the ear and foot are controlled by the dominant left hemisphere, which implies that their functioning remains intact. However, the eye and hand’s functioning are affected.

The stress profile is visually represented as follows:



The G Profile functions from the logical left hemisphere under stress. This means that logic and auditory access are your anchors. Your ability to see and communicate will be inhibited to a greater or lesser degree. The major stressor for your profile is the sensitivity to others' body language and facial expression. You tend to "hear what you thought you saw". It will therefore be beneficial for you not to maintain eye contact in stress or conflict situations. Because of the hand blockage, you are unable to respond with comprehension right away; you need time to think things through and structure your thoughts.

The blockage of the eye (and hand) will exacerbate your tendency to make mistakes and to miss written detail. You are therefore encouraged to double check your accuracy with regard to written tasks, calculations, spelling and figures.

Your ability to hear is not affected by stress. On an emotional level, however, you will prefer time out where you can withdraw and immerse yourself in a hobby or activity where you can analyse the problem on your own first; this is because the blocked eye prefers not to see others or interact with them during stress.

Because of your blocked hand, under stress you may take longer to start or finish your work, to communicate articulately and to organise tasks optimally. The ability to move is not affected. Your performance in sport or hobbies which require foot / ear coordination (such as dancing) will still be good. These types of activities should be pursued for stress and frustration elimination and to re-activate energy in the non-dominant right hemisphere.

## 7. **Barriers**

- Emotional outbursts and body language of other people
- Visual distractions in the environment
- No visual recognition leads to demotivation
- Haphazard work or home environment
- Having to listen patiently for long periods
- Inability to easily see the 'big picture'
- Feelings of being overwhelmed and stuck when stressed

## **8. *Implications***

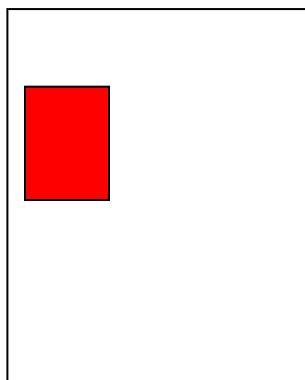
- The auditory modality is available at all times
- You have the exceptional ability to visualise and conceptualise
- You may battle with concentration and focus if the left eye becomes distracted
- You may make silly mistakes because the left eye reads for meaning, not detail
- You are sensitive to the facial expressions and body language of others
- You absorb and interpret information best by listening without visual distraction first
- You have a good memory for auditory detail and sequence, and you tend to focus on these
- Under stress the left eye struggles to see the visual organisation and processes
- You may experience difficulty with relaxing as the eye is always sensitive and distracted
- When stressed, you will take decisions cautiously if the initial time out for reflection is allowed
- Your biggest challenge is language expression to the exclusion of receptive skills

## **9. *Recommendations***

- You understand best by focusing on auditory information or practical application; and process data by analysis, verbalising and writing
- You [refer to process verbal instructions, discussions and tapes in order to absorb auditory detail as you easily remember what you heard. You have a good memory for numbers and details of a conversation or talk
- When presented with visual information be aware of the potential to reverse letters and numbers, especially when pressured or stressed
- When dealing with visual information you prefer to start with the big picture before trying to structure it in an orderly or sequential way. Under stress you will battle to process visual information. The wider the page and the smaller the text, the less effective the functioning of the left eye will be.
- The challenge for your profile is that you tend to prefer a clear, linear progression of information, and you may battle to pick up nuances in what is said and to see specifics. You also struggle to process and understand your own and others' emotional reactions, especially if an argument goes beyond the rational and stresses you. You will be more affected by the body language and expression than what was actually said.
- You may benefit from closing your eyes when trying to recall details under stress.
- This will also help you during conflict with others so as to be less affected by their negative facial expression or body language.
- You need emotional safety and security
- You need quiet time to process information
- You need to communicate what you are seeing from others – how do they look naturally? This will help you to clarify what body language is emotional, and what isn't.

**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 G Profile:**

- Linguistic intelligence – creative
- Visual-spatial intelligence – free design
- Musical intelligence – technical precision
- Bodily-kinaesthetic intelligence – structured
- Naturalistic intelligence
- Interpersonal (social) intelligence – patience and sympathy
- Spiritual intelligence
- Componential intelligence
- Experiential intelligence - conditional

**Intelligences requiring structured experiences for development:**

- Linguistic intelligence – factual
- Logical – mathematical intelligence (conditional)
- Visual-spatial intelligence – structured
- Musical intelligence – harmonizing and composing
- Bodily-kinaesthetic – creative
- Interpersonal (social) intelligence – assertiveness
- Intra-personal intelligence
- Contextual intelligence

## **11. *Profile strengths***

- You originate projects
- You anticipate needs
- You stimulate potential
- You concentrate intensely
- You are at ease with others
- You appreciate others' input
- You are a penetrating observer
- You look on the bright side
- You give people "space"
- You see the potential in people

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

- You become stressed when others look unhappy
- You may miss detail in what you see
- You may lack patience
- You may easily be manipulated by others' body language
- You do not enjoy reprimanding others

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

- You respond well to the positive body language of others
- You need to see love – visual recognition and encouragement
- You are charming and gentle with others
- You enjoy organising surprises and giving pleasure to others
- You enjoy putting people together
- You seek out unusual recreations
- You have a devoted and flexible parenting style

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

- You are skilled with the written word
- You place strong emphasis on values
- You collect information by listening
- You stimulate group participation through discussion
- You win trust through charm and flair

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

- You like working together with others
- You prefer an open and friendly atmosphere
- You need variety and challenge
- You enjoy an upbeat, ideas-oriented work place
- You work best with warm, colourful people

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

- You bring enthusiasm and energy
- You are a catalyst who brings people together
- You initiate meetings and conferences
- You get things moving from the start
- You provide new and interesting aspects and ideas

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

- You seek out what motivates people
- You promote harmony and balance
- You accept new projects
- You use variety and challenges to stimulate others
- You convey the overall value of work to others

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

Careers where you can use your ability to visualise objects (concrete level) or conceptualise new ideas (intellectual level) are ideal.

Examples of these types of jobs are architecture, design of any kind, training and development, plastic surgery, journalism, consulting and advisory jobs etc. Marketing, assisting a team and talking others through ideas would be ideal.

Your natural tendency to talk a lot can be used to help calm others and to manage teams rather than being restricted to a submissive role.

The impatient right ear needs to be acknowledged in so far that interactions with clients need to be kept to brief, structured intake or feedback sessions, with the vast amount of the time at work being spent on your own, allowing you to immerse yourself in fantastic conceptual time.

### **18.1 Additional career notes**

Build on your abilities to:

- See opportunities which don't presently exist and tailor your current job to meet your changing needs, or those of your employer
- Invent an entirely new job for yourself which fulfills a need you see or predict in the market
- Establish instant rapport and demonstrate your ability to meet people and make them feel comfortable with you
- Use your sense of humour to change formal and stilted situations to more open and manageable encounters
- Use creative approaches to get yourself noticed and remembered
- Use the same energy and ability to see options to help you get around barriers or resistance you may encounter

Improve your current job by:

- Delegating routine tasks to others if possible
- Teaming up with co-workers and/or working in teams
- Finding other creative people to brainstorm ideas with
- Working different shifts, arranging more flexible work hours or job-sharing
- Changing your focus if you're not stimulated or challenged – work on something else
- Making sure you have a variety of projects available to work on
- Joining or starting organisations for people with similar expertise or interests
- Attending conferences and getting involved with professional organisations

Additional notes:

- Focus your attention and energy on seeing what is really in front of you rather than on what could be
- Be realistic in planning your new job search in terms of how long it will take, what it will require of you, how much it will pay, and how you will afford to live. Make contingency plans in case it takes longer than you hoped
- Curb your tendency to leap before you look
- Work on developing self-discipline. Use proven time-management skills and systems to help you get and stay organised

## **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 G: “ANYTHING IS POSSIBLE”**

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

- Lets you work with a diverse group of people on a variety of projects which are motivated by creative inspiration
- Lets you create new ideas, products, services or solutions to problems which will help other people, and then see your projects become a reality
- Is fun, challenging, and always varied
- Rarely requires you to handle the follow-through, routine details or maintenance of the system or project
- Lets you work at your own pace and schedule with a minimum of rules and structure and the freedom to act spontaneously
- Lets you meet new people, learn new skills and continuously satisfy your curiosity
- Is consistent with your personal beliefs and values and lets you create opportunities which benefit others
- Takes place in a friendly and relaxed environment with humour, goodwill and a minimum of interpersonal conflict
- Allows you the freedom to follow your aspirations and participate in exciting and

- intriguing adventures
- Takes place in an environment which appreciates and rewards enthusiasm, ingenuity and imagination

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

- Eagerness to think outside the box and consider new possibilities
- Courage to take some risks, try new things and overcome obstacles
- A broad range of interests and the ability to quickly learn new things that interest you
- Natural curiosity and skill for getting the information you need
- Ability to see the big picture and the implication of actions and ideas
- Excellent communication skills and the ability to enthuse others
- Adaptability – you can shift gears and change directions easily
- Perceptive about people – you understand their needs and motivations

## **19.3 Potential blind spots:**

- Difficulty setting priorities and making decisions
- Impatience with people who lack creativity
- Reluctance to do things in traditional or routine ways
- Lack of discipline when attending to or following through on important details
- A tendency to become bored and sidetracked, especially once the creative process is complete
- A dislike of taking on repetitive tasks
- Impatience working in systems or with people who are too rigid
- A propensity to always focus on what's possible rather than what is probable or "doable"

## **19.4 Pathways to success:**

- Prioritise, focus and follow through!

## 20. Summary

The G Profile is warmly enthusiastic, high spirited, ingenious and imaginative. You are able to do almost anything you put your mind to, but tend to focus on those things that really interest you. You are always quick with a solution and ready to help anyone with a problem.

You sometimes prefer to rely on your ability to improvise than to prepare things thoroughly in advance. You have a knack for being able to justify and find compelling reasons for getting exactly what you want.

Live your outer life with more feeling, 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-an-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 than 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.