# *Genetic Brain Organisation Profile*

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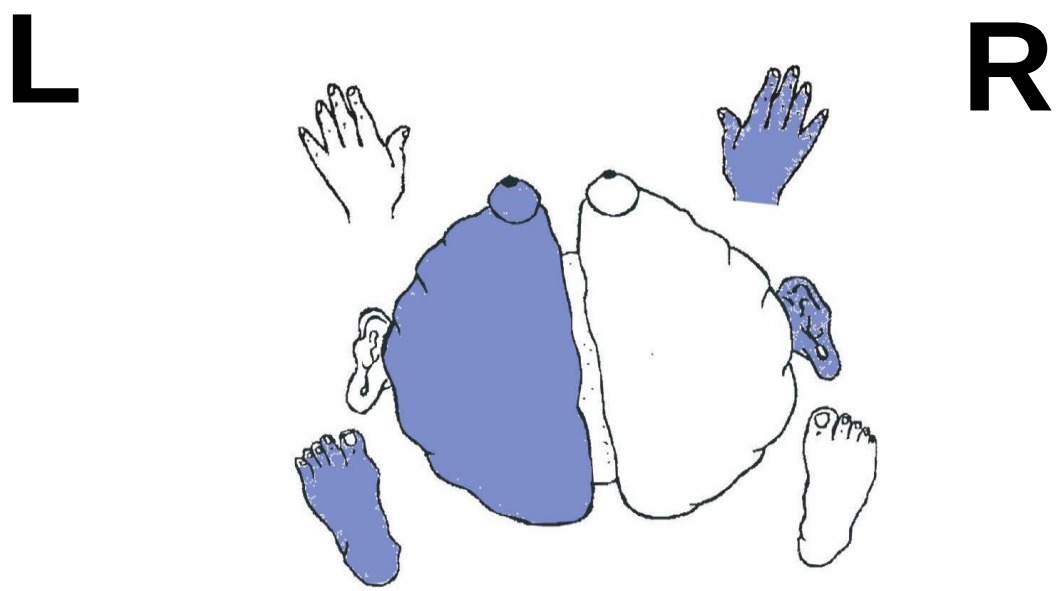
# *1. Genetic Brain Organisation Profile*

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

**PROFILE CC: 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 C profile has left brain hemisphere dominance. In addition, the hand, ear and foot modalities are also controlled by the dominant left hemisphere. The sole modality controlled by the non-dominant right 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 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 right hand was indicated as dominant over the lesser deltoid resistance of the left hand. This implies:

- Structured verbal communication
- Structured written communication
- You tend to be articulate
- You tend to be organised
- You are able to delegate effectively
- Fine motor co-ordination
- You are likely to consistently process tasks using the same method or procedure

Dominance in the right hand also implies a natural ability for sports which require structured hand techniques. These sports include among others: tennis, golf and cricket. The combination of the right eye / right hand can provide skills for aim-related activities such as archery, shooting in netball or basketball and darts.

## 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:

- Unstructured, creative approach to problem solving
- Likely to consistently adopt new approaches to problems
- Tends 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 CC Profile tend to exhibit the following traits:

- Outgoing and friendly
- Supports the under-dog
- Sympathetic
- Cooperative
- Popular with others
- Respects traditions
- Gracious
- Personable
- Conscientious
- Helpful to friends / colleagues etc

# 4. Overview

The CC Profile's major attributes are logic, verbal and auditory access. They are highly verbal and quickly hear and absorb auditory detail, but they are unable to see the specifics, process emotion *and* remain aware of the big picture.

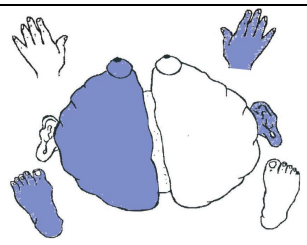
The sensitive left eye physiologically prefers to track from right to left. This may result in tiredness if much reading is required. There is also the potential for letter and number reversals or transpositions when dealing with highly detailed text.

The CC Profile processes information best through hearing it, and then integrates the knowledge through follow-up discussion.

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



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

The CC Profile processes visual information in the right (gestalt) hemisphere. However, all other modalities, apart from the foot, function primarily from the dominant left hemisphere. Thus, processing occurs naturally in both sides of the brain. The dominant ear constantly absorbs and

processes auditory 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 also possible. However, the left eye has the 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 CC 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.

CC 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 efforts. Visual recognition such as notes, cards, emails, flowers etc. have a much more profound effect on you than verbal praise.

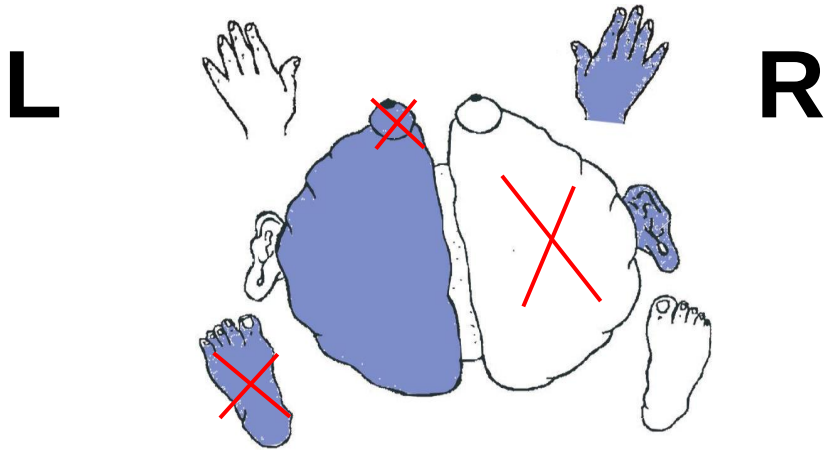
The detail right ear of the CC Profile hears information quickly. During long-winded discussions, the ear may become bored which will ultimately lead to the creative/sensitive eye finding something to look at – the structured ear gets the creative eye into trouble!

The expressive hand modality is controlled by the structured left brain hemisphere. This implies the ability to plan, organise and structure information and processes easily remains intact, however, physical movement or reflexes may be slower, and problem solving and conflict resolution will be impaired. This is due to the blocked foot under stress.

# *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 CC Profile, the ear and hand are controlled by the dominant left hemisphere, which implies that their functioning remains in tact. The eye and foot's functioning is affected.

The stress profile is visually represented as follows:




The major stressor for the CC Profile is negative facial expressions or body language of other people. Because the right brain hemisphere is affected first, cognitive functions such as visualisation, conceptualisation, evaluating, criticising and comprehension will be impaired. Because the left eye is blocked, its sensitivities are exacerbated – it will see on an emotional level.

The sensitivity of the eye will result in you "hearing what you thought you saw". It is therefore beneficial for you not to necessarily maintain eye contact during verbal interactions, especially if conflict arises.

In addition, the left eye's blockage implies that you will need to double check the accuracy of your work with regard to spelling, calculations, and reading detail.

Your abilities to hear and function (perform tasks) are 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.

The ability to operate with the hand is not affected. However, physical reaction times will be slower and movements may be clumsy due to the blocked foot. Deliberate physical activity should be planned on a daily basis for stress release and to re-energise the non-dominant right brain hemisphere.

# *7. Barriers*

- Emotional outbursts and negative body language of other people
- Visual distractions in the environment
- No visual recognition can lead to demotivation
- Haphazard work or home environment
- Having to listen patiently for long periods

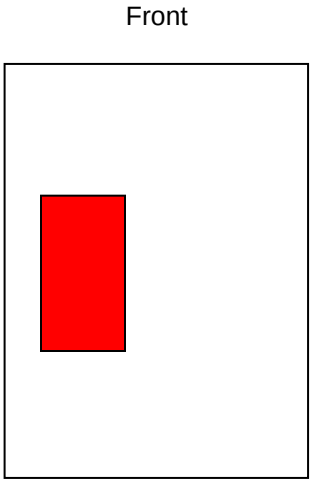
# 8. Implications

- The tactile, auditory and verbal modalities 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
- Your 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 you process data by analysis, verbalizing and writing
- You prefer 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. However, you may battle to pick up the 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 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:**




# *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 CC Profile:

- Linguistic intelligence – creative
- Visual-spatial intelligence – free design
- Musical intelligence – harmonizing and composing
- 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 – technical
- Bodily-kinaesthetic – creative
- Interpersonal (social) intelligence – assertiveness
- Intra-personal intelligence
- Contextual intelligence

# 11. Profile strengths

- You are gentle, yet firm
- You are a fast, thorough worker
- You are quick to act
- You promote loyalty
- You are decisive
- You are unselfish with time
- You are excellent with people
- You tirelessly assist others
- You are tactful with associates
- You create harmony

# 12. Profile weaknesses

- Your attention can be easily distracted by what you observe
- You can be impatient during long discussions. You won't interrupt but will 'day-dream'
- You are sensitive to the body language of others which may lead to intimidation or manipulation
- You may agree to requests in order not to upset others
- You may not forgive and forget very easily

# 13. Relationship needs

- You are happy and relaxed when others look happy
- You needs to "see love"; visual recognition and encouragement are important for you
- You enjoys socialising and entertaining
- You are the centre of scheduled family life
- You are known for your warmth, caring and commitment
- You are self-sacrificing and loyal
- You are a provider for the family's future

# 14. Communication style

- You are an entertaining conversationalist
- You listen with understanding and sympathy
- You are a strong verbal communicator
- You obtain information through your senses
- You appreciate others' view points

# 15. Preferred business setting

- You like goal-oriented associates
- You prefer friendly, organised surroundings
- You need associates who are supportive and appreciative
- You provide service within the specified structure
- You like being where the action is

# 16. Working in a team

- You enjoy and promote team efforts
- You settle conflicts which may arise
- You respect rules and authority
- You are in tune with the needs of your fellow team members
- You are on time and accurate with data

# 17. Management style

- You provide leadership through personal attention
- You keep people up to date and informed
- You set an example for hard work and follow-through
- You use past experience to support decisions and take action
- You are known for your 'personal touch'

# 18. Career indications

Careers where you can use your strong people skills to improve quality of life are ideal.

Examples of these types of jobs are training and development, plastic surgery, journalism, consulting and advisory jobs etc.

The impatient right ear needs to be acknowledged in so far that interactions with clients need to be structured and focused, with you in the driver's seat. These sessions should be well planned and the aims and goals should be well defined and measurable.

## 18.1 Additional career notes

In order to maximise the fulfilment that you receive from your current position:

- Work to resolve conflict with supervisors, colleagues and subordinates
- Ask your boss to be clear about performance expectations
- Leave environments where there is great interpersonal tension
- Volunteer for a meaningful cause either inside or outside of your organisation
- Ensure you have sufficient social stimulation during the day
- Implement efficient systems and insist that your subordinates use them
- If you're not a manager, identify a project which needs to be done and volunteer to take it on

- Find people with complementary strengths to give you input and balance
- Set up short terms goals which are challenging yet attainable pace

# *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 CC: "WHAT CAN I DO FOR YOU?"

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

- Lets you establish and maintain warm, genuine interpersonal relationships with other people while working in real and tangible ways to improve their quality of life
- Has practical benefit for people and allows you to learn and master new skills before having to use them
- Allows you to exercise control, working with many people and helping them to work harmoniously towards a common goal
- Has clear expectations and where the evaluation of your performance is judged upon established and explicitly stated criteria
- Takes place in a cooperative environment which is free from conflict and tensions between supervisors, colleagues, clients etc.
- Allows you to make decisions and use efficient procedures to ensure that all the details of the project are carried out according to your specifications
- Provides you with plenty of opportunities to interact with other people throughout the day and to be an integral part of the decision making process
- Allows you to organize your own work and that of those around you to ensure that things run as smoothly and efficiently as possible
- Takes place in a friendly environment where people express their appreciation for your accomplishments, where you feel approval and support and where you can consider your co-workers to be your friends
- Takes place in a setting with an existing structure, where the chain of command is known and understood, and where authority is respected

### 19.2 Work related strengths may include:

- Ease with meeting new people and the ability to make them feel comfortable
- Excellent organizational skills
- You are a team player who works hard to realize the goals of the organisation
- Great energy and drive to get things accomplished and to be productive
- The ability to cooperative and create harmonious relationships with others
- A practical and realistic attitude and the aptitude to work with facts and details
- Nurturing and helpful nature – you praise and reinforce the good in others
- Decisiveness – you are a stabilizing factor

- Ability to maintain an organisation's traditions
- Strong organizational skills and a clear work ethic
- Loyalty and belief in the value of working within a traditional structure
- Strong sense of responsibility – you can be counted on to do what you say
- Ability to follow established rules and procedures
- Common sense and a realistic perspective

## 19.3 Potential blind spots:

- Avoid the tendency to burn bridges once you think you've crossed them
- Try not to be too easily discouraged
- Gather more objective criteria for decisions rather than relying solely on your personal feelings
- Adjust your focus from time to time to more long-range career planning
- Look for career opportunities beyond what is already known
- Try to overcome your reluctance to embrace new and untested ideas
- Your sensitivity to criticism may become a hindrance that means that you do not learn from others
- Your desire to focus on the present rather than on the future means that you may have a somewhat short-term view
- You have difficulty adapting to change and switching gears easily
- You have a tendency to be oversensitive and to avoid unpleasant situations
- You can have difficulty working alone for extended periods of time
- You have a tendency to show favouritism
- You have a tendency to become drained by taking on others' emotional burdens
- You can be inclined to make decisions prematurely before you have sufficient information
- You have a tendency to be opinionated and rigid at times
- You can have difficulty hearing and accepting opposing viewpoints
- You have a tendency to become discouraged without constant praise or expression of appreciation

# *20. Summary*

The CC Profile is warm-hearted, talkative when they are taking the lead, popular, conscientious, born co-operators and active committee members or team players. You will always find them doing something nice for someone else.

CC Profiles blossom with lots of encouragement and visual praise.

You have little interest in abstract thinking or technical faculties; your main interest is rather in things that directly and visibly affect people's lives.

Live your outer life with more feeling 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 20th 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-kinaesthetic 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-kinaesthetic 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 curricula 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 centring on 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 analysing 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 or 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.