<u>How to Enhance Your Left or the Right</u> <u>to a Full-Brained Potential:</u>

Introduction:

As members working in secular organizations, educational institutions or as preachers in religious institutions, we have seen some students or people good at certain areas while others at certain other areas. I have lived through the days and years in India when educationists and religious men wondered why some students are good at certain areas while they are not good at certain other areas. We didn't find out any solution nor did we seek to explain why. We just said some are good at something, and others are good at something else, and we made selections based on their better performances, and even guided students in the area of their better performances.

We also were not sure whether there are Left-Brained, Right-brained or full-brained people, but we were sure of one thing: That some people are left-handed and the majority of others are right handed. **Are some of us left- handed?** If you are not a left-handed person, you may have certainly found and known one.

A long standing myth connected to Scottish lore holds that 10% to 12% of human population are left handed, and that these are good fighters. Another adage says that the left-handed people are smarter. Are the left handers good fighters? Are they smarter?

From a long list of some left handed people, I have selected some who have become very famous and rich in various fields of activities. We'll have a look at them.

- Artists: Leonardo Da Vinci- Michael Angelo- Pablo Picasso.
- Actors : Amitab- Abishek Bachan- Charlie Chaplin- Angelina Jolie- Julia Roberts-Tom Cruz- Nichole Kidman – Brad Pitt-
- Writers: Louis Carroll- H.G. Wells Mark Twain
- Fashion: Gean Paul Gaultier, Buzz Aldrin.
- **Music:** David Bowie, Glen Campel- Celine Dion Sir Paul McCartney
- Historians: Mahatma Gandhi , Albert Einstein- Napoleon Bona Parte- Julius Caesar-Aristotle- Neal Armstrong- Henry Ford- Mary Curie.
- Royalty: Queen Victoria, Queen Mother- Prince Charles, P. William
- American Presidents: Thomas Jefferson John F. Kennedy Ronald Reagon- Gerard Ford - Bill Clinton- Barack Obama.
- Business/others: Dr. Albert Shwitzer Bill Gates- Oprah Winfrey.
- Sports: John Mc Enroe- Allan Bordar- Jimmy Connors, Gambhir, Gary Sobers
- Soccer: Pele- Diego Maradona- Herman Medford Hugo Sanchez.
- Yester Years: Mozart Beethoven- Winston Churchill, Hellen Keller

The above as mostly artists, actors, musicians, sportsmen, politicians, authors, etc.

We also may have an equally long list of rich and famous right-handed people. Very rich! Very famous! And Very successful! In this paper, we shall see what each set is good at, how and why. We also shall find whether we can combine the activities of both the hemispheres of the brain and have a full-brained capability. Researchers on the brain had found something very tangible!

Early Research on The Brain:

Early Research on the Brain started with Dr. Paul Broca (1824 – 1880) who has been referred to as a brilliant French neurologist, surgeon, anthropologist, child prodigy and a man well ahead of his time. In the 1860s, he discovered that parts of the brain were specialized for certain functions. He found that the speech function is centered in the left hemisphere of the brain and thus began research of the right left specialization of the brain. However, it took a long time to have further studies. In the later part of the century, scientists have also found that the two hemispheres of the brain are connected at the



Cerebral (or upper) part by the Corpus Callosum, a mass of fibres bundled up like a telephone cable. Carl Sagan, in 'The Dragons of Eden' refers to the Corpus Callosum as a 'complex cabling system', a 'bundle of two hundred million neural fibers processing something like several billion bits per second between the two cerebral hemispheres. Scientists have always sought to find 'connecting links'. Here we have a connecting link; but does it really connect the two brain hemispheres? And do the two acting hemispheres complement each other through the link?

Further Studies: Existence of the Two Halves of the Brain!

In 1963, two surgeons Phillip Vogel and Joseph Bogen developed a surgery, called a commissurotomy, in which they severed the immense network of nerve fibers connecting the left & right hemispheres in hopes of stopping the spread of epileptic seizures from one side to the other. As a result, each half of the brain could be studied in isolation from the other. The fact that each hemisphere was completely unaware of the other's existence was fortuitous or a chance occurrence for the study of brain functions.

California Institute of Technology physiologist Dr. Roger W. Sperry ran his then-famous tests on the new split-brain patients. When Sperry began testing, he found that the splitbrain patients displayed a clear ability to function without the benefit of communication between the hemispheres. He was awarded the Nobel Prize in medicine in 1981. He then discovered that when the corpus callosum was severed (for medical reasons), the brain creates two separate minds. There's one mind in one hemisphere and one in the other. The right side of the brain was more visual and emotional, while the left side of the brain was more analytical and objective.

Studies done with patients who have disconnected hemispheres also have revealed that the right brain is linked to, and so controls the left half of the body-including the left ear, hand and eye; and the left brain is linked to and controls the right half of the body. But then why and how just a few of us are left-handed, and the majority of us are right-handed? A researcher in the Trafford Centre of Medical Centre, U.K. Jenny Regan says, "There has always been a fight in the brain in the early development; each brain hemisphere tries to dominate. Both the hemispheres have a protein **Fgf8**. They try to attract some migrating nerve cells. There is another protein called 'Nodal' in the left brain. When the Fgf8 teams up with 'Nodal', the pair wins, and so the left brain becomes stronger and gets fully developed making people right-handed. Still others have different opinions.

Ned Herrmann went a step further than Sperry in 1970 and developed the theory of brain dominance. In his brain dominance model, Herrmann identifies four different modes of thinking: A. Analytical thinking B. Sequential thinking C. Interpersonal thinking D. the

imaginative thinking A and B: Analytical and Sequential thinking are connected with the left brain, and C and D: Interpersonal and the imaginative thinking are connected with the right brain.

Herrmann also coined the concept Whole Brain Thinking as a description of flexibility in using thinking styles that individuals can cultivate, allowing the use of all four styles of thinking. Even without the severing of the Corpus Callosum, the brain can be used to full capacity.

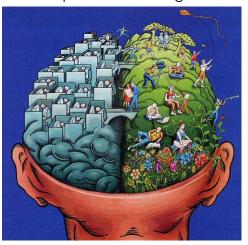
According to Herrmann, here's an illustration of the range of activities of the two hemispheres of the brain. Is it possible to develop all these? Or is it possible to develop a few of these activities to perfection?

The World by Storm!

The subject of Right Brain and Left Brain took the Western countries, and of course, the entire world by storm. The Westerners are known to have lived more by rationality in comparison to the Easterners and the Asians, who live more by the heart and the emotions. So it was a shock to the Westerners to know that the rational mind was just a part of the brain and not the full brain.

This storm heralded some events termed dichotomania-the fervent movement that erupted in the 1970s in an attempt to push the American society out of their "left brain" thinking, and into a more intuitive, artistic "right brain" mode. Over the next four decades, over 45,000 articles and books-most of them medical and scientific-were written on the left brain/right brain issue.

As Robert Ornstein, author of The Right Mind, points out, right brain ideology crept into every corner of culture and society during this time, including "Beethoven, biography,



photography, drawing, cooking, auto repair, and housekeeping."

However, the study of the right brain and the left brain has put the 20th century thinkers in touch with our own diversity. The studies have honoured the different ways that people work things out and they have provided a springboard for using unconventional approaches to studying and problem solving.

Can We Use our Brains to Full Capacity?

In the middle of the 20th Century, a few scientists, who have been studying the brain, started to understand that most of us are not using our brains to capacity. Scholars, who marveled at scientists like **Einstein**, made an elaborate research on his brain after his death and finding nothing extraordinary in his brain wondered why we could not use our brains more. They also found that it is not because the capacity is not there, but because we have not been taught how. I hope you will agree to this statement. However, we shall seek to see how we can explore the possibility of using our brain to capacity and find out how we can achieve it by using One common activity of ours as a guinea pig. I think we can choose 'Writing' as most of us would be involved in one or another form of writing.

But before that we'll see some other functions of the left and the right brain.

Other Functions of the Left and the Right!

Besides controlling the left or the right side parts of the body, these hemispheres also control some other vital functions of the body. In 'Drawing on the Right side of the Brain', Betty Edwards calls the 'left' hemisphere the 'Know-it-all' side. This term is appropriate because "when it comes to reasoning, expressing and also writing, the left brain thinks it knows everything; and of course, it deserves credit for grammar, punctuation, format, and so many other things" and so it wants to **LORD** over the right side of the brain.

Thomas Blakesley in his book, 'Right Brain' refers to the right hemisphere as the 'silent partner'. This term is also appropriate for some reasons: though the 'right' expresses itself randomly – in pictures, rhythms and colors, it cannot articulate in words; and so <u>something happens!</u> The left brain dominates, and leaves many of us left brained or right handed people with many left brain functions.

Assets of a Right Brained Person:

We have seen some very popular and famous 'left handed' people of the present and the past; and now we can conclude that they are all 'Right Brained' people! We can also arrive at finding what most of them are good at: Music, vision, colors etc, and so they are musicians, artists, painters, etc.

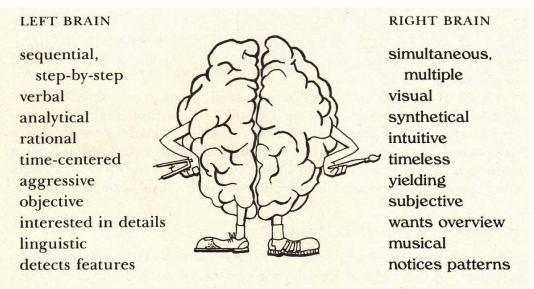
However, can there be any exceptions? We find some American presidents, who are very good at speech in the list. Abraham Lincoln, John F. Kennedy, Obama, & et al. Of course, speech is a 'left-brained' activity. But how are they conversant with some activities, which are controlled by the 'Right brain'? **This is a vital Point!** We shall see this point, in a few moments.

Assets of a Left Brained Person:

As most of us/majority of us are not 'left-handed', which means we are 'right handed; and we can rightly guess we are 'left-brainers', and our left brain is very active. We can also see what we can be good at. As we all know, we are good as teachers, pastors, lawyers, legal experts etc. However, from a look into the pictorial representation of the two hemispheres, with the functions marked against each hemisphere, we will get to understand better, the functions of the two hemispheres of the brain.

Representation of the Activities Involved with the Two Hemispheres of the brain.

(The Illustration below is from 'Writing on Both Sides of the Brain' by Henriette Anne Klauser' Chapter 3: Page-26)



'Brain Preference Indicator Test'

We may think we are left brained or right brained! Is there a way to test? What's the best way to find? Is it possible to find what functional brain that we do have? Some researchers have brought out a <u>'Brain Preference Indicator Test'</u>. Such 'tests' are available in the 'net', too. As a student of CLU who has taken 'How to Have Communion with God' and 'Creative Writing' Courses, I have taken great efforts to find out what active brain I do have! However, one could take the 'Brain Preference Indicator Test' and afterwards, find one's scores quickly! (The suggestions for the scores are given after the test is taken).

Getting our Brain Preference Indicator is a great step in order to find which half of the brain is more active with us so that we can try to enhance working the other half in order to have a full brained capability. From the indications from our SCORES, we can understand something! A score of 5 would indicate that you are using both halves of the brain together quite easily and effectively. A score near 1 or 9 (Some of us?) would indicate an extreme brain hemisphere preference, and we should work on cultivating a greater ability to use the other hemisphere of the brain. The best scores are between 3 and 7. (Some of us may have) That means we are using both the hemispheres. However, we can work towards the other half to make our work more effective.

Other Uses of Knowing the 'Brain Preference Indicator'!

1. Each family member can get benefitted from knowing the 'Brain Preference Indicator'

score. Getting all the members of our family take this test, discussing each member's score and the resulting differences between each person should help each family member become more understanding towards the other, and will improve family relationships considerably. We are not out to try and change others' personalities, but to understand them, come alongside them and support them.

2. In teaching English, we have a key sentence, 'Peter teaches Paul grammar'. Here, we can see the order of importance in teaching: Peter, first; teaching, second; Paul the student, the third; and 'grammar', the last. Thus, to a teacher, to know the student is more important than grammar. A better knowledge of the student helps us meet their needs, better!

Any other use?

Use of Both the Hemispheres, effectively!

Now, we have come to the most important point of the article/Presentation, 'How to use both the hemispheres of the Brain, effectively'? To study this, as I said before, I have chosen a common activity, 'Writing'. One may wonder why 'writing'; but one can choose 'writing' because each of us would be connected to at least one or another form of 'writing'. Writing also poses lots of problems. We shall see some of them.

ONE 'Best' Form of writing!

In one of the presentations, I asked a question in order to confirm what can be one 'best' form of writing. <u>It is:</u> In addition to reading books of our interest or area of study, what other books do we choose to read? Though <u>for me:</u> these are 'Story Books', many others too, suggested 'story books' for many reasons. Reading demands writing; therefore, we can conclude that the best form of writing that draws a huge audience is 'Story writing'.

A 'Better Story'!

Can we think of 'writing' something better than a story? Besides stories, one kind of story can interest us most; and I think we can rightly guess: **For Me:** this is 'Biography' or the life story of a person. You may know why a life story can be better. I am always reminded of a very great story in India, a book of Mahatma Gandhi, 'My Experiments with Truth'. It was a hit because more than many things, it illustrates Gandhiji's personal experiences of life.

I also have experienced something amazing! We are publishing an International Christian magazine called 'Rapture'. It has a one and a half to two pages regular feature of **'Testify to Jesus'**, where we insert the personal testimony of readers, an important saint or a leader. These pages are more frequently read than the other pages, and we get very useful feedbacks. So I can urge everyone who would like to render God a service to write a 'Testify to Jesus' story or an Autobiography. Certainly God has done many things to you. You can write to speak about them.

This can bring us to the right conclusion that we can think of writing our 'Life's story in addition to the many kinds of books that we may think of writing. But whenever we think of writing an 'autobiography' or a 'testimony' as we call in the Christian circles, there is

always a conflict in <u>'focus'</u>. I tend to write more about 'me'. Instead, I can focus on the reader; what can he/she gain from it? In what way my experiences can be useful to him/ her. I can also focus on Jesus who is the giver of all good gifts in our lives. The more I think in these lines, my 'autobiography' or my 'testimony' will become better, and more useful.

Back to 'Writing': Is Writing Left or right brained?

We may have seen that the three Rs – Reading, Writing and Arithmetic – are all leftbrained activities. However, when it comes to writing, many of us do not proceed well: even the left brainers! What happens?

Some Problems in 'Writing'?

Many would face the starting problem. Many of us go on – starting to write – striking – writing again; or if there is a possibility, many of us would seek to postpone writing. If we study the functions of the brain more closely, we can understand the cause of the problem. In fact, the **skill of 'Writing'** is left-brained – whereas the Material for writing comes from the Right Brain – Intuition, Inspiration, Creativity are all right brained. I think we all will agree.

Write on Both Sides of the Brain!

'Writing on Both Sides of the Brain' is a work by Henriette Anne Klauser. In the book she identifies two forces acting in us. She calls them by the names of the two servants of one of Shakespeare's famous character Prospero in the play 'The Tempest'. They are: Ariel, the gentle spirit, and Caliban, the critical spirit.

Something Happens in the Process of Writing:

When Ariel, the gentle spirit (Right Brain) presents something important for writing, Caliban, the critic interferes and keeps saying "This is not correct – that is not correct," with the result ... the Writing stops ...

How Good are Ariel and Caliban? Is there a Way Out?

Though Ariel, the gentle spirit – the Right Brain – can bring in all intuition, creativity etc., it cannot put things properly. However, when Caliban, the critic – the left brain, keeps interfering – the creativity or the intuition of the Right Brian is marred and the writing stops!

We have to make both these halves <u>act at will!</u> In order to do this, and make the right brain work, we have to keep the interfering left one on control. <u>We can do this through</u> <u>one means!</u> Get Ariel to work when Caliban is not active. Call Caliban to work when Ariel has finished his work. His work is very important: grammar, editing, formatting etc. However, he has to be quiet until the right brain has contributed everything! Use Caliban profusely in grammar and editing so that he will not interfere when Ariel is contributing. But does he do it? (Remain quiet?) ????. And that's why many of us fail in writing!

Another Illustration!

Many of us don't think we can draw well! We say, "I can't; I have no talent for drawing!" Betty Edwards, an art enthusiast opines, "Almost everyone is good at drawing", and in her book on Drawing, she shows everyone who says, 'I can't draw' that all of us can draw. In one of her best known exercises, she has asked students to draw 'upside down'. She

has given students in her study Picasso's 'Portrait of Igor Stravinsky'. Her students first copy the picture right side up. As the results are pretty primitive, she then tells them to turn the picture 'upside down', and draw the curves and the picture. When the students turn their finished product right side up, and compare it with the first sketch, they find that the upside down sketch is invariably, and dramatically superior to the first attempt.

You can prove this in a matter of a few minutes!

Can We Quickly try a Drawing?

You can see below a much easier picture than Picasso's Portrait - Just a few Ordinary flowers! You can take just two minutes to draw this!



Now, can you take another 2 minutes to draw the 'Upside Down picture?



You can find for yourself something very important. You did better, the second time!

You will see that your second drawing is much better than your first drawing. Yes!! How? (I got the second one done by a student!!)

The writer says, 'This puzzle puts the logical left brain into a logical box'. She gives a plausible explanation of the illogical result. The left brain refused the task of processing the upside down image. Confused and blocked by the unfamiliar image, and unable to name or symbolize as usual, the left brain turned off, and the job passed over to the right hemisphere.

What happens in art also happens in writing!!

How do we 'Let Ariel Contribute'?

Studies have shown that we can let Ariel contribute in many ways using many techniques. In the use of the following popular techniques, we are in fact, getting 'Ariel' to contribute to the writing.

- a) Rapid writing There are different methods of rapid writing (Free-writing, writing using circles, etc.)
- b) Brainstorming and writing
- c) Branching and Writing.
- d) Early Morning writing, etc.

Get a 'Second Stroke' of Ariel! Re- vision!

Have you tried breaking the word 'revision'? The word Revision when it is broken becomes Re – vision. We can take up the writing and have a re vision. With all the above techniques, we'll produce something raw. We can leave it – maybe for a few hours or a few days. At this stage of re – vision, we certainly get valuable points added to the work.

Give Credit to Caliban!

Now, with the work completed, we invite Caliban, the left brain to work. We have already seen that Caliban is someone like a sincere teacher with 'I am always correct' attitude. We sit up to edit, word by word, sentence by sentence. Use Caliban (the left side of the brain) exclusively when you have called him to work: E.g., while in editing, formatting, checking grammar, improvising on structures, etc. It also may be that when the left brain is used exhaustively, it may allow Ariel, the right brain to give its contribution, first of all. Now when the work is complete, it can be given for further proof reading, editing and publishing.

For Better Results!

Many of us have got involved in the process of writing in various ways. However, we can achieve better results by keeping the critic under control, draw more from the right brain – original thoughts, inspiration and creativity – before proceeding to edit and finalize.

Conclusion:

We give great credit to Leonardo Da Vinci's Mona Lisa, Mozart's compositions, Shakespeare's sonnets or St. Paul's epistle to the Romans. What have they really done?

They drew exclusively from the right brain or waited on the Lord, wrote all the inputs that they got from God's inspiration, and then passed on to perfect each imperfect stroke of the brush, the music note or the written work with the left brain. The success depended on

the full brained work. Can we also try a full brained work potential?

Just One Final Tip!

After hectic schedules of work, we pass on to enjoy some activities like music, painting etc. However, we can do something more to it. We can think of spending some time learning these – like music, painting etc., as we have seen that we can draw really well, so that we will put to use the other side of the brain effectively, which will add to the overall development of our personality. Indians are always prone to quote, 'While in Rome, do as the Romans do'. But when they go to London, they will still be thinking of Iddlies and sambar, or parotta and sabji. Can we think of relishing the British food, too? Can we think of making use of our left and right brain potential, too?

Thank you.



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