

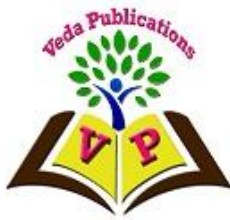
A STUDY ON CREATING A BALANCE BETWEEN THE RIGHT AND LEFT BRAIN THROUGH CLASSROOM CULTURE”

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ABSTRACT



The human brain is the command centre for the human nervous system. It receives signals from the body's sensory organs and outputs information to the muscles. Students would have used their left-brain to upgrade in their major, and the right-brain to showcase their creative talents. The key implication of this research is to teach the various techniques that can be applied to both areas of brain by improving the student learning & understanding towards the subject. . Learning is not alone sharing information rather it’s all about understanding.

Keywords: *Left brain, Right brain, Instructor.*

INTRODUCTION

The human brain is the command centre for the human nervous system. It receives signals from the body's sensory organs and outputs information to the muscles. Like all vertebrate brains, the human brain develops from three sections known as the forebrain, midbrain and hindbrain. The forebrain develops into the cerebrum and underlying structures; the midbrain becomes part of the brainstem; and the hindbrain gives rise to regions of the brainstem and the cerebellum.

Forebrain: This consists of the cerebrum, hypothalamus, and thalamus.

Midbrain: Consists of the tectum and tegmentum.

Hindbrain: Is made of the cerebellum, medulla, and pons.

The human brain is divided into two hemispheres, the left and right, connected by a bundle of nerve fibres called the corpus callosum. The hemispheres are strongly, though not entirely, symmetrical. The left brain controls all the muscles on the right-hand side of the body and the right brain controls the left side. One hemisphere may be slightly dominant, as with left- or right-handedness.

According to Sperry's dated research, the left brain is also connected to: Logic, sequencing, linear thinking, mathematics, facts, thinking in words. The right brain is more visual and intuitive. It's sometimes referred to as the analog brain. It has a more creative and less organized way of thinking. Sperry's dated research suggests the right brain is also connected to: Imagination, holistic thinking, intuition arts, rhythm, nonverbal cues, feelings visualization, daydreaming. The popular notions about "left brain" and "right brain" qualities are generalizations. Still, there are some important differences between these areas which can be identified among students and can be improved through continuous practice through teaching aids. Almost everyone has heard about this research on learning, memory and hemispheric specialization in a general way, but reviewing it in a bit more than the usual level of detail may enhance its value to our teaching.

REVIEW OF LITERATURE

Buzan cites many research studies conducted in the 1960's and 1970's, especially work done by Nobel Prize winner Roger Sperry, Robert Ornstein and Eran Zaidel. In summary, the brain has two halves that are connected by a complex network of nerve fibers. Initial research concluded that each hemisphere specialized in different types of mental activity. In most people, the left cortex deals with logic, words, numbers and reasoning, "the so-called academic activities". The right cortex deals with images, imagination and patterns. While one side is actively processing information, the other side tends to rest. Research showed that when people worked to develop weak mental areas, all mental performance seemed to improve.

Ornstein (1970), argued that western cultures make use of the left hemisphere and neglect the right hemisphere through their emphasis on language and logical thinking, while eastern cultures, the right hemisphere is more exercised through their religious, languages, intuition and mysticism. Traditional teaching techniques should be reevaluated and/or broadened and new teaching techniques created in the light of "new" information about how the brain operates. The biggest problem that faces college graduates is their inability to see the whole picture and to recognize patterns in new information introduced to them.

Williams (1983), the left-brain & right-brain distinction provides a simple and convenient basis for questioning our education system and for helping students learn. Whether each hemisphere is responsible for a certain type of thinking and learning is not the point. The point is that people naturally think and learn in different ways. Students come to class with a "two-sided mind." Instructors must encourage them to use it, to develop it, utilizing both types of thinking (left and right brain) so that they have access to the greatest possible range of mental abilities. The role of the instructor and the classroom atmosphere he/she creates is to motivate and maximize student learning.

Kalpana Vengopal and Mridula (2007), studied on the Hemispheric Preferences for Information Processing and Styles of Learning and

Thinking in Children. For the study, a sample size of 250 students from VIII standard was randomly selected to identify the brain hemisphericity. SOLAT tool validated by Venkataraman (1989) was administered. Results revealed that there is significant difference in the right and left hemispheric preference for information processing and that boys are right hemispheric oriented and girls are left hemispheric oriented.

Merve Oflaz (2011), therefore, having an idea about the brain dominance of the students is important. If the teacher knows his or her students well, he or she can use the methods, techniques and materials adequately. This research will provide the teachers to find out the dominant part of their students' brains and use the appropriate classroom techniques, methods and tools according to them. It will also give the opportunity of finding out the teachers' brain dominance to help him / her to be aware of his / her teaching style.

Ahmad Mohamed Awad Al Ghraibeh and Abdullah Ahmed AlZahrani (2013), a study on Learning and Thinking Styles Based on Whole Brain Theory in Relation to Sensory-Motor Integration. The study aimed to explore learning and thinking styles based on Whole Brain Theory and their relationship with sensory-motor integration. Two tests were used to explore the correlations between the two variables (learning and thinking styles based on Whole Brain Theory test and sensory-motor integration test). The study revealed the relationship between both the Hemisphericity and sensory-motor integration test is significant in favour of females than the males.

OBJECTIVES

To refine the existing teaching methodology in the field of higher education which helps the instructor to level the student's right and left brain.

FROM THE ABOVE REVIEW OF LITERATURE THE FOLLOWING FACTORS ARE IDENTIFIED:

1) MOTIVATIONAL VIDEO/ CLASS ROOM EXERCISE/ MELODY MUSIC:

Let me tell you "presenting Motivational Videos" was my first step before starting my class. It had taken to get students out of depression. It

prepares your mind to fight with the bad thoughts and to be more hopeful towards life as you start your class. I must tell you that as soon as you finish watching one motivational video on a particular topic you're drowning in, you would feel so positive and energize and at that moment you feel so positive about future and not feel sorry about the past, you would be fully prepared to give your best and it feels like a something started to flow through your veins and motivational videos or the speaker who speaks our heart out must be the reason behind all this positive vibes. This is a simple technique for any age or subject. As you review concepts, have students stand next to their desks. Instead of raising their hands to volunteer, students will do a jumping jack. Award points to encourage participation! Establish a routine between activities in which you do something physical. Whether it's a quick classroom stretch, walking around the room or even a few jumping jacks, this can be a great way to start the class off right or pump some energy into dozing students.

For example, have students:

- act as electrons doing different kinds of bonding or breaking off as chemical reactions take place
- Imitate animals within different species as they identify the species, class, etc.
- play science charades with your latest vocabulary terms (tons of possibilities for animals, plants, weather, etc)

Music also has a big impact on mood truly bleak music could improve your enthusiasm for your task. Something else to look out for is music with catchy lyrics. Musical pieces without words might be better working companions, as human speech and vocalisation is something our brains pay particular attention to. Playing melody music for some time before begging of the class will improve the student's attention.

2) START WITH OPEN-ENDED OR BRAIN STORMING ACTIVITY:

Brainstorming in the classroom is a useful teaching strategy. It is a powerful tool that generates ideas and helps find solutions to problems. Brainstorming has other attributes; it motivates, stimulates, and promotes student interaction. The

combined, focused mental power generated during a brainstorming session elevates performance and almost guarantees improvement in the cognitive thinking ability of the student. Open-ended questions are an effective way to challenge your students and learn more about how they think. They encourage extended responses and allow your students to reason, think, and reflect. Some examples of open-ended questions include, "What do you think...?" and "How did you decide...?"

3) CREATIVE WAY OF USING ICT

Material is presented in short phrases rather than full paragraphs. The instructor talks about the information on the slide rather than having students read it on their own. Relevant pictures are used. Irrelevant pictures decrease learning compared to PowerPoint slides with no picture. As an instructor we must have background image related to the topic what we discuss which helps the students to improve their creative thinking capacity and also better understanding of the topic discussed.

4) ACTIVITY BASED TEACHING

There is an old Chinese proverb that says: "I hear and I forget. I see and I remember. I do and I understand." This holds true, especially with regards to activity-based learning techniques. In the recent past, activity-based learning has emerged as a potential model for helping a child understand concepts easily and achieve the goals of education. The traditional way of learning is proving to be inadequate to offer the child the understanding, perspective and the ability that he needs in the dynamic scenario of the millennial culture. A thorough review of different learning and teaching styles suggests. The activity-based approach is an effective method which creates a visible improvement in a child's understanding, learning and psychology. Since the child learns by performing tasks independently or in groups, the activities invariably instil a sense of confidence in the child. The child learns to rely on their own understanding and skill-sets and feel more confident; not only in the educational environment but outside as well.

SCOPE & LIMITATION

Apart from the above mentioned factor further literature research can be conducted to analysing various other factors which also facilitate the brain to balance the right and left hemisphere. Due to time constrain more of literature study is done on the topic further it can be improved by doing research on other factors which help the instructor to improve the students ability of balancing the right and left side of the brain.

FINDINGS & SUGGESTION

For decades, scientists studied about how the brain functions with respect to processing information. With the advance of technology, scientists were able to conduct more sophisticated research. We know that certain areas of the brain control various processes in the body. Using graphics in presenting material to students can be very helpful to analyze the key topics in the course. Careful design of a course graphic by the instructor is very essential. So, I would recommend the instructor to play motivational videos before starting the class and it affects every individual in a good way and somehow they will get new hope for their future or dreams and new energy to be more attentive during class time.

CONCLUSION

From the above theoretical study, it is discovered that each side of the brain actually has its own ability. As instructor we have more responsibility to stimulate both right and left sides of the brain of our students by adopting few of the above mentioned teaching aids. Each hemisphere is capable of wider and subtler mental activities than previously thought. The key implication of this research for teaching is that use of a variety of techniques that appeal to both areas of brain function will improve student learning. For example, enhancing lectures with graphical aids or using colour, music or other sensory experiences with a presentation or assignment will touch both logical and creative brain processes. As with a muscle, the more the brain is exercised, the more it develops, leading to an increase in the capability to learn and remember. If we educators can exercise the entire brain, the student should be able to learn and remember more.

Learning is not alone sharing information rather it's all about understanding.

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