

## Further Perspectives on Our Brains

The more angles something is viewed from, the better our understanding of it is. Following are additional aspects relating to our brains that will raise our awareness and thus enhance learning and teaching in our classrooms:

Some facts about our brains

- over of 20% of the body's oxygen intake is used by the brain
- the brain weighs about 1.5 kilograms
- we use about 5% of its capacity in our everyday lives
- for efficient brain functioning, quality nutrition, regular exercise and at least two litres of water daily are necessary
- there are hundreds of thousands of electrical connections made in the brain each and every second

To optimise our students' learning, we need to cater for both the left and right brain in our teaching

For example, when listening to music, the left brain hears the words and the right brain hears the music

- the brain initially processes images then it processes words
- 20th century teaching focused predominantly on using the left brain through teacher instruction, involving
  - an ordered knowledge based society; knowing stuff was important
  - information transfer the key; understanding not a priority
  - a linear dimension only; making very few connections

To quote Harpaz, it was all about - Learning was Listening  
- Teaching was Telling  
- Knowledge was an Object

Now, in the 21st century, our focus has changed to using the whole brain, both sides in sinc  
- today is a conceptual and creative age, not an information transfer and retention age

Our challenge as teachers is to create a classroom environment in which our students are encouraged to link their thinking and learning to

- ponder about possibilities and discover new connections and understandings in their worlds
- make thinking visible for our students by using thinking tools; could you imagine learning to dance not being able to see other peoples' feet?
- be more metacognitive, thinking about their thinking, by using Multiple Intelligences and Habits of the Mind

I remember saying to one of my students many years ago who wasn't on task, "what are you doing?" He replied, "Thinking sir," to which I said quite authoritatively, "Stop that and get on with your work"

- my preoccupation with content was limiting my students' capacity to create new understandings and apply what they had learned

“ When the brain is thinking it is talking to itself” Plato