Human Brains and Henry's Thinking

Biologically we are feeling creatures that think.[1]

What you will find on the pages of this workbook is a learning program based on what neuroscientists now know about our human brains and how we learn. Some of the things we now know about the brain that will help you and those you teach are:

1. The cerebral cortex is the uniquely human part of our brain.
2. It is divided into two complementary hemispheres.
3. These hemispheres communicate with one another through the corpus collosum.
4. Each hemisphere is unique in the specific types of information it processes.
5. The limbic system is made up of cortical cells that we share with other mammals
6. The limbic system places an affect or emotion on information coming from our senses
7. The emotion attached to information from the limbic system is communicated to the cortical system. That is ***the feeling comes first.***
8. We gather information about the world outside us through our senses.
9. Our differences in how sensitive we are to different stimuli contributes to the ways we perceive the world.
10. The right hemisphere functions like a parallel processor and allows us to take immediate inventory about the space around us and our relationship to it.
11. In the right hemisphere there is no time except the present.
12. Our right mind is spontaneous, creative, free of judgment, empathetic, and able to convey how we are part of the whole of this universe.
13. Our left hemisphere organizes information in linear, sequential configuration.
14. The left mind thrives on details, on categories and comparisons, and on weaving many details into descriptions.
15. Our left hemisphere speaks to us constantly, reminding us not only what to do moment by moment, but who we are.
16. Our right hemisphere interprets nonverbal communication and evaluates the cues of expression enriching the linguistic capacities of the left hemisphere.
17. ***The brain has enormous capacity to change, recover and rebuild connections, which is called plasticity.***
18. Each brain is unique, therefore we all learn differently.
19. Learning comes through patterning.
20. Emotions are critical to our ability to perceive patterns.
21. Our brains process wholes and parts simultaneously.
22. We have more than two types of memory: spatial, rote and muscular
23. Learning is enhanced by challenge and inhibited by threat.
24. Because the emotion comes first, and is dissipated quickly, we can choose which emotions we sustain.
25. We all have ***response-ability***; our brains give us the information and the choice about how we relate to our experience.

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[1] Taylor, Jill Bolte, My Stroke of Insight, A Brain Scientist's Personal Journey, Plume, 2009, p. 17