### 1. 「ニューロサイエンス(神経科学)」への取り組みとその背景

### • What is neuroscience? How should we understand it?

The science of learning is an interdisciplinary field of study that examines how people learn and how the learning and development field can improve talent management, performance improvement, organizational learning, training, instruction, and instructional design.

 Would you show us some examples of activities or exercises that will activate our brain?



Neuroscience is increasingly gathering attention in the domain of L&D,
such as ATD international conferences. Please explain the reason of this
popularity in terms of changes in business environment or capabilities
required for today's workforce.

The volume and depth of research in recent years has provided a wealth of evidence that there is a significant reciprocal relationship between brain functioning and the environments in which humans behave. Therefore, it is becoming quite clear that organizations will do well by aligning offerings, as well as their full enterprise with natural brain functioning. Doing so will ultimately drive more sales, enhance wellness and increase productivity.

Recent research has significantly enhanced our understanding of brain processes and the function of its underlying neural systems (how the brain stores and processes information, how neural plasticity impacts learning and observable behavior, etc.). This has led to a stronger understanding in such

areas as biological processes involved in learning, the relationship between brain hemisphere and sensory dominance, the impact on cognitive control, dynamics of mental flexibility, personal motivation and social and emotional learning. The science of learning is an interdisciplinary field of study that examines how people learn and how the learning and development field can improve talent management, performance improvement, organizational learning, training, instruction and instructional design.

- 2. 人材開発・組織開発を担う人にとって必要な「ニューロサイエンス」の知識
- When considering workplace learning and employee's relationship, what kind of brain activities or neurochemicals should we focus on and why should we do so?
  - It is necessary to humanize the environment. The most positive environment for increased performance is where workers feel positive, safe and relaxed.
- Based on the neuroscientific point of view, how will the development aimed at leadership or better communication evolve over time?
  - ❖ Leadership stands on 3 pillars. It is about influencing, inspiring and serving others. We can all do this but in different ways. In time leadership, must evolve by personalizing a personals leadership style and competence based on their unique design. Einstein was a different type of leader than Nelson Mandela based on their unique intelligence preferences, gifts, and talents.

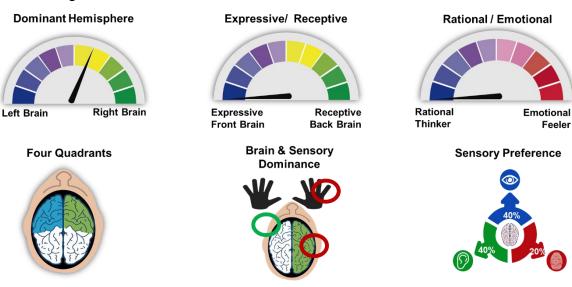
### • Please show us some frameworks or services you provide at Neuro-Link

# to optimize employees learning.

We assess the drivers that impact brain performance and then provide learning solutions to improve the following:



We help Companies identify a persons neurological design in order to align the persons design with the work they do to ensure optimal engagement. The following factors are assessed:



### • Based on neuroscience, what do you think are the important points for

## HR & organizational development practices?

There are certain fundamental premises of the neuroscience of learning that are essential for learning professionals and practitioners to understand its implications and applications to organizational learning. Learners, facilitators and practitioners engaged in the field of learning, who are responsible to prepare children, students and workers for developing the skills necessary to prosper in the new landscape predicted for 2020, will be well-served to have a clearer understanding of issues such as:

- The bio-chemistry of learning and thinking
- The neuroscience of the learning cycle
- Neuroplasticity, cognitive flexibility and how it is at the core of learning and behavior change
- How the brain works and processes information
- Learning implications of different brain areas
- How to identify and improve drivers that optimize brain performance
- The concept of neurological dominance, it's relationship between brain hemisphere and sensory dominance and its impact on performance and safety
- How to determine people's unique neuro-design and learning potential
- Aligning workers' neuro-design and learning preferences with their job functions to increase their joy, energy, sense of purpose, engagement, performance and flow
- How to prepare and activate the brain for learning, thinking and creativity
- Brain fitness skills and exercises to flex mental muscle
- Accommodating social and emotional learning in the workplace
- Advanced visual skills for 21st century workers who processes volumes of information
- How to develop complex problem solving, critical thinking, creativity and emotional intelligence skills for future workers
- Aligning workplace learning practices with memory and attention spans
- Creating brain friendly working and learning environments

Therefore, anyone responsible for the learning and development of another should strengthen their understanding of the <a href="neuroscience of learning">neuroscience of learning</a> and apply this evidence-based knowledge to their practice of human capital development. The goal would be for them to incorporate these fundamental principles into their learning design and test them through the applications of their new neuro-

aligned learning interventions and determine their impact on behavior change, performance improvement, wellness, productivity and safety.

- Please give some advice or messages for corporate executives and HR people responsible for providing better workplace learning environment and performance improvement.
  - ❖ You cannot improve what you cannot measure. It is important for every person who is responsible for the development of someone else to have to have a predictive measurement tool of people's neurological design and the factors that optimize this potential. Once his assessment has been done managers can align peoples neurological design with the work they do which will improve engagement. By optimizing the drivers that impact a person's brain performance, as identified in the measurement, people's performance can significantly be improved.