CONCEPT

Neuroscience of Learning and Learning Agility: Evidence-Based Workplace Learning Design



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Introduction:

Organisations spend heavily on training that employees forget within weeks, while programmes are still built on neuromyths such as learning styles and one-off events. Talent teams also struggle to tell which employees learn fast from new experience. This Core Concept course applies the neuroscience of learning to workplace practice: how attention, working memory, encoding and consolidation work, which techniques the evidence supports, and how learning agility is assessed and developed. Participants work on multi-sector cases and produce a Brain-Informed Learning Redesign and Learning Agility Development Plan.

Course Objectives:

- Explain how attention, working memory, encoding and consolidation shape what employees retain from training and on-the-job learning
- Apply spacing, retrieval practice, interleaving and elaborative feedback to redesign existing learning programmes
- Screen programme content and vendor offers for neuromyths and grade the strength of the evidence behind brain-based claims
- Adjust programme scheduling and delivery for the effects of sleep, stress, emotion and motivation on learning, without making medical claims
- Assess learning agility in employees and high-potential pools using its recognised facets and structured assessment methods
- Produce a Brain-Informed Learning Redesign and Learning Agility Development Plan that builds a stronger learning culture

Target Audience:

- L&D specialists responsible for designing and reviewing corporate learning programmes
- Internal trainers and facilitators responsible for retention and transfer of what they teach
- Talent and succession staff responsible for identifying and developing high-potential employees
- Line managers responsible for coaching, stretch assignments and team learning
- HR business partners responsible for capability and learning culture initiatives

Course Outline:

Day 1: How the Brain Learns: Attention, Memory and Plasticity

- Attention Networks and Executive Functions in Workplace Learning
- Working Memory Capacity Limits and Information Chunking
- Encoding, Consolidation and Retrieval as a Memory Pipeline
- Adult Neural Plasticity Evidence from Taxi Driver and Musician Studies
- Learning Programme Baseline Audit Against Learning Science Criteria

Day 2: Evidence-Based Techniques, Brain States and Neuromyths

- Ebbinghaus Forgetting Curve and the Spacing Effect
- Retrieval Practice and the Testing Effect in Adult Learning
- Interleaved Versus Blocked Practice for Complex Workplace Skills
- Sleep, Stress, Emotion and Motivation as Conditions for Encoding
- Neuromyth Screening: Learning Styles, Left-Right Brain and Critical Periods

Day 3: Applying Learning Science to Training and Workplace Learning

- Learning Science Redesign Checklist for an Existing Programme
- Spaced Reinforcement Calendar Using the Leitner System
- Low-Stakes Quiz and Retrieval Prompt Design for Workshops and Microlearning
- Elaborative Feedback Protocols: Timing, Specificity and Self-Explanation
- Cognitive Overload Reduction in Slides, Job Aids and On-the-Job Instruction

Day 4: Learning Agility: Concept, Assessment and High-Potential Development

- Learning Agility Defined: Learning from Experience and Applying It in New Situations
- Lombardo and Eichinger Facets: Mental, People, Change and Results Agility and Self-Awareness
- Learning Agility Assessment Methods: Behavioural Interviews, Multi-Rater Feedback and Self-Report Instruments
- Stretch Assignments and After-Experience Reflection Routines for High-Potentials
- Brain-Based Vendor Claim Evaluation and Evidence Quality Grading

Day 5: Case Work and the Learning Redesign and Agility Plan

- Energy Operator Case Study: Safety Induction with Low Retention After Four Weeks
- Banking Case Study: Graduate Programme and High-Potential Pool Selection
- Learning Culture Action Charter for Managers and Talent Teams
- Brain-Informed Learning Redesign and Learning Agility Development Plan Drafting
- Evidence Challenge Panel: Defending Design Choices Against Neuromyth Tests

Skills You Will Gain:

- Learning Science Application
- Retrieval Practice Design
- Spaced Reinforcement Planning
- Neuromyth Detection
- Evidence Quality Appraisal
- Learning Agility Assessment
- High-Potential Development Planning
- Learning Culture Building

Why Attend This Course:

- Return with a Brain-Informed Learning Redesign and Learning Agility Development Plan for a programme and talent pool you are responsible for
- Cut the share of training content that employees forget by building retrieval and spacing into programmes you already run
- Challenge neuromyths and unsupported brain-based vendor claims with a clear evidence test
- Compare learning design and talent practice with L&D and HR colleagues from energy, finance, government, healthcare and services

Conclusion:

Training produces lasting capability only when it works with the way memory forms and when organisations know which people learn fastest from new experience. The one week move from attention, working memory and consolidation, through the techniques the evidence supports and the neuromyths to retire, to redesigning real programmes and assessing learning agility. The final day applies this to cases from several sectors and closes with a Brain-Informed Learning Redesign and Learning Agility Development Plan ready to take back to work.