

# Professional Master's Degree Neuropsychology and Education



## Professional Master's Degree Neuropsychology and Education

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

Website: [www.techtitute.com/us/psychology/professional-master-degree/master-neuropsychology-education](http://www.techtitute.com/us/psychology/professional-master-degree/master-neuropsychology-education)

# Index

01

Introduction

---

*p. 4*

02

Objectives

---

*p. 8*

03

Skills

---

*p. 14*

04

Course Management

---

*p. 18*

05

Structure and Content

---

*p. 22*

06

Methodology

---

*p. 40*

07

Certificate

---

*p.48*

01

# Introduction

Neuropsychology in the field of education is one of the emerging sciences that is currently gaining more traction. This behavioral neuroscience is based on the natural scientific method of studying the brain. Through the combination of the hypothetico-deductive and analytical-inductive methods, professionals in this discipline intervene therapeutically in both individuals with congenital or supervening brain lesions and in individuals without lesions. This program is designed to provide access to specific knowledge of this discipline in an intensive and practical way. A great value for any professional.



“

*In-depth knowledge of neurodevelopment and its multiple implications in a comprehensive program meant to propel you to the next professional level”*

Neuropsychology work in education is complex, as it covers a broad spectrum of intervention that requires professionals possess specific training in the various branches of brain development. This discipline, deeply linked to neurology and the physiological study of the brain, is affected by the changes that the evolution of knowledge in this scientific branch achieves. For professionals, this means an intense challenge of continuous updating that allows them to be at the forefront in terms of approach, intervention and monitoring of the cases that may arise in their practice.

Throughout this program, the student will review all the current approaches to the work practiced by neuropsychologists with regard to the different challenges posed by their profession.

The functioning of memory, language, the relationship between laterality and cognitive development, sensoriality and many other aspects, will be the topics of work and study that the student will be able to integrate in their training. A high-level step that will become a process of improvement, not only on a professional level, but also on a personal level.

This challenge is one of TECH's social commitments: to help highly qualified professionals to specialize and develop their personal, social and work skills during the course of their training.

Not only does it lead through the theoretical knowledge offered, but it also shows another way of studying and learning, more organic, simple and efficient. We will work to keep you motivated and to develop in you a passion for learning. We will encourage you to think and develop critical thinking.

This **Professional Master's Degree in Neuropsychology and Education** contains the most complete and up-to-date program on the market. The most important features include:

- ♦ The latest technology in online teaching software
- ♦ A highly visual teaching system, supported by graphic and schematic contents that are easy to assimilate and understand
- ♦ Development of practical cases, presented by practising experts
- ♦ State-of-the-art interactive video systems
- ♦ Teaching supported by telepractice
- ♦ Continuous updating and recycling systems
- ♦ Autonomous learning: full compatibility with other occupations
- ♦ Practical exercises for self-assessment and learning verification
- ♦ Support groups and educational synergies: questions to the expert, debate and knowledge forums
- ♦ Communication with the teacher and individual reflection work
- ♦ Content that is accessible from any fixed or portable device with an Internet connection
- ♦ Complementary documentation banks permanently available, even after completing the program



*A program created for professionals who aspire to excellence that will allow you to acquire new skills and strategies in a smooth and effective way”*

“

*A deep and comprehensive dive into strategies and approaches in neuropsychology and education”*

Our teaching staff is made up of working professionals. That way we ensure our students receive the up-to-date training we aim to provide. A multidisciplinary team of trained and experienced specialists in different environments, who will develop the theoretical knowledge efficiently, but, above all, will put at the service of the program the practical knowledge derived from their own experience: one of the differential qualities of this Professional Master's Degree.

This mastery of the subject is complemented by the effectiveness of the methodology used in the design of this program. Developed by a multidisciplinary team of E-Learning experts, it integrates the latest advances in educational technology. In this way, you will be able to study with a range of comfortable and versatile multimedia tools that will give you the operability you need in your training.

The design of this program is based on Problem-Based Learning: an approach that conceives learning as a highly practical process. To achieve this remotely, telepractice will be used: with the help of an innovative system of interactive videos, and learning from an expert you will be able to acquire the knowledge as if you were facing the case you are learning at that moment. A concept that will make it possible to integrate and fix learning in a more realistic and permanent way.

*Human sensory systems studied from a neuropsychology point of view, with a focus on intervention and improvement.*

*The basic processes of cognitive development in relation to learning and school development in an intensive and comprehensive training.*



# 02

# Objectives

The objective is to create highly qualified professionals for professional practice. An objective that is complemented in a global manner by promoting human development that lays the foundations for a better society. This objective materializes by helping professionals reach a much higher level of expertise and control. A goal that, in just a few months, can be achieved with a high intensity and precision program.







“

*If your goal is to improve professionally and to acquire a qualification that will enable you to compete among the best, then look no further: Welcome to TECH”*



## General objectives

---

- ♦ Qualify professionals to practice neuropsychology applied to education, in the development of children and young people
- ♦ Learn how to carry out specific programs to improve school performance
- ♦ Access the forms and processes of research in neuropsychology in the school environment
- ♦ Increase the capacity for work and autonomous resolution of learning processes
- ♦ Study the attention to diversity from the neuropsychological approach
- ♦ Learn about the different ways to implement enrichment systems for learning methodologies in the classroom, especially aimed at diverse students
- ♦ Analyze and integrate the knowledge necessary to foster student's school and social development



*Seize the opportunity and take the step to get up to date on the latest developments in neuropsychology and education”*





## Specific objectives

---

### Module 1. Basis of Neurosciences

- ♦ Study the anatomy of the brain and its relationship to learning
- ♦ Learn the brain basis of motor development
- ♦ Explore the quality of brain plasticity
- ♦ Analyze the various agents affecting child, adolescent and adult brain development

### Module 2. Developmental Neuropsychology

- ♦ Study the neurobiological basis of development
- ♦ Explore the bases of differential cognitive functions
- ♦ Develop educational applications of metacognitive regulation and neurobiological markers
- ♦ Learn to make a clinical diagnosis based on the knowledge learnt

### Module 3. Neuroeducation

- ♦ Reflect on the meaning of neuroeducation
- ♦ Study the peculiarities and fundamental characteristics of the different areas of the brain associated with emotions and learning
- ♦ Learn the different forms and techniques of intervention in education

#### **Module 4. Visual and Auditory Functionality for Reading, Language, Languages and Learning**

- ♦ Learn about the characteristics and development of the organs of sight
- ♦ Detect, evaluate and intervene in the classroom with visually impaired students
- ♦ Acquire the ability to work for the improvement of visual perception
- ♦ Become familiar with vision and reading skill training programs
- ♦ Study saccadic models
- ♦ Develop characteristics and development of the organs of the ear
- ♦ Learn about the risk factors
- ♦ Identify ways to detect, evaluate and intervene in the classroom with hearing impaired students
- ♦ Acquire the ability to work for the improvement of hearing
- ♦ Learn the psychobiological aspects of hearing loss
- ♦ Develop the necessary skills to make curricular adaptations in this area
- ♦ Study all the implications of visual and auditory problems on literacy learning

#### **Module 5. Motor Skills, Laterality and Writing**

- ♦ Delve into the relationship between learning and neurodevelopment in the educational field
- ♦ Study aspects related to gross and fine psychomotor skills
- ♦ Know the relationship between motor skills and the psyche and its developmental implications
- ♦ Study laterality in relation to the development of cognitive abilities
- ♦ Develop the different degrees of evolution in the evolutionary lateral stages
- ♦ Learning the different motor disorders from their impact on learning

- ♦ Unravel all aspects of the reading acquisition process
- ♦ Learn how to intervene in the possible difficulties related to learning in the classroom: dysgraphia, dyscalculia, dyslexia, etc.
- ♦ Develop intervention models for prevention, development and learning difficulties in the school environment
- ♦ Develop communication and relationship skills with fathers, mothers and families

#### **Module 6. Research Methodology**

- ♦ Learn research methodology and its different approaches
- ♦ Develop a complete research method, from the choice of the topic, to the proposal and production
- ♦ Learn how to conduct quantitative research and analysis of results
- ♦ Learn descriptive statistics
- ♦ Learn how to develop a hypothesis test and its interpretation
- ♦ Study the use of correlational and group comparison statistics and be able to use them in research

#### **Module 7. Multiple Intelligences, Creativity, Talent and High Capacities**

- ♦ Learn all aspects related to the theory of multiple intelligences and their assessment
- ♦ Learn the neuropsychological basis of creativity and its development in the educational context
- ♦ Know the possibilities of working in the area of high capacities

**Module 8. Dyslexia, Dyscalculia and Hyperactivity**

- ◆ Incorporate the necessary knowledge to detect and intervene in the classroom in cases of dyscalculia, dyslexia and TDH
- ◆ Understand the incidence of comorbidity in this context
- ◆ Learn about the possibilities of neurotechnology applied to dyslexia, ADHD and dyscalculia

**Module 9. Neurolinguistic Processes, Difficulties and Intervention Programs**

- ◆ Develop neurobiological aspects involved in language development
- ◆ Study the neuropsychological bases of language and the potential for its work and development
- ◆ Analyze the processes of language comprehension, sounds and reading comprehension.
- ◆ Analyze language and literacy disorders
- ◆ Learn how to assess, diagnose and intervene in language difficulties

**Module 10. Emerging Educational Alternatives in the Management of Learning Difficulties**

- ◆ Learn about information and communication technologies and how they are linked to the management of difficulties
- ◆ Know the use of ICT in educational centers
- ◆ Discover the benefits of chess as an educational tool
- ◆ Understand the benefits of medication for the management of difficulties

# 03 Skills

Once all the contents have been studied and the objectives of this Professional Master's Degree in Neuropsychology and Education achieved, our students will have gained superior expertise and performance in the field. A very complete approach in a high-level program that makes the difference.



“

*Achieving excellence in any profession requires effort and perseverance. But, above all, the support of active professionals, who will give you the boost you need by providing the necessary means and support. Just what TECH puts at your service”*



## General skills

---

- Employing neuropsychology in the educational environment
- Conduct programs to improve school performance
- Apply the research methods of educational neuropsychology
- Construct new ways of attending to diversity in the classroom

“

*Our objective is very simple: To offer you quality specialized training with the best teaching methods today, so you can reach new heights of excellence in your profession”*







## Specific skills

---

- ♦ Discern brain anatomy and its role in the development of different learning processes from a motor, sensory, emotional, etc. standpoint
- ♦ Use knowledge of Neuropsychology in the development of diverse intervention programs in all areas of school development
- ♦ Apply the data extracted from the analysis of neurology in clinical diagnosis, supported by specific knowledge of developmental neuropsychology
- ♦ Apply different forms of intervention in education based on data extracted from the analysis of brain functionality in emotions and learning
- ♦ Work with sensory difficulties in school environments, from a neuropsychological approach based on in-depth knowledge of visual and auditory functionality
- ♦ Implement brain stimulation strategies in education through the development of motor skills and laterality
- ♦ Devise, develop and analyze comprehensive research in the field of neuropsychology in the educational setting
- ♦ Apply ICT in school environments
- ♦ Use chess and meditation as tools for managing difficulties
- ♦ Apply new strategies in cases of high capacities
- ♦ Learn to create educational program that consider multiple intelligences and the promotion of talent and creativity
- ♦ Develop efficient intervention programs for students with dyscalculia, dyslexia and hyperactivity
- ♦ Perform effective assessment, diagnosis and intervention of language difficulties

04

# Course Management

Within the concept of total quality of the program, we are proud to offer our students a teaching staff of the highest level, chosen for their proven experience in the educational field. Professionals from different areas and fields of expertise that make up a complete, multidisciplinary team. A unique opportunity to learn from the best.



“

*Our professors will put their experience and teaching skills at your disposal to offer you a stimulating and creative process”*

## Management



### Dr. Sánchez Padrón, Nuria Ester

- ◆ Degree in Psychology, University of La Laguna
- ◆ Master's Degree in General Health Psychology, La Rioja University
- ◆ Training in Emergency Psychological Care
- ◆ Training in Psychological Care, Penitentiary Institutions
- ◆ Teaching and training experience
- ◆ Experience in educational attention to children at risk



05

# Structure and Content

The contents included in this specialization program have been developed by the professors on the program with a clear purpose: to ensure our students acquire each and every one of the skills required to become true experts in the field.

This Professional Master's Degree will enable our students to learn every aspect of the different disciplines involved in this area: a very complete and well-structured program that will lead them to the highest standards of quality and success.



“

*Through a complete and exceptionally segmented approach, you will be able to access the most advanced knowledge available today of neuropsychology and education”*

## Module 1. Basis of Neurosciences

- 1.1. The Nervous System and Neurons
  - 1.1.1. Introduction
  - 1.1.2. Development and Latest Approaches
- 1.2. Basic Anatomy of Learning-Related Structures
  - 1.2.1. Description
  - 1.2.2. Physiology of Learning
- 1.3. Psychological Processes Related to Learning
  - 1.3.1. Emotions and Learning
  - 1.3.2. Emotional Approaches
- 1.4. The Main Brain Structures Related to Motor Skills
  - 1.4.1. Brain and Motor Development
  - 1.4.2. Laterality and Development
- 1.5. The Plastic Brain and Neuroplasticity
  - 1.5.1. Definition of Plasticity
  - 1.5.2. Neuroplasticity and Education
- 1.6. Epigenetics
  - 1.6.1. Definition and Origins
- 1.7. Effects of the Environment on Brain Development
  - 1.7.1. Current Theories
  - 1.7.2. The Influence of the Environment on Child Development
- 1.8. Changes in the Infant Brain
  - 1.8.1. Brain Development in Infancy
  - 1.8.2. Features
- 1.9. Evolution of the Adolescent Brain
  - 1.9.1. Brain Development in Adolescence
  - 1.9.2. Features
- 1.10. The Adult Brain
  - 1.10.1. Characteristics of the Adult Brain
  - 1.10.2. The Adult Brain and Learning

## Module 2. Developmental Neuropsychology

- 2.1. Neuroscience
  - 2.1.1. Introduction
  - 2.1.2. Concept of Neuroscience
  - 2.1.3. Neuromyths
- 2.2. The Brain: Structure and Function
  - 2.2.1. Primary Brain Structures
  - 2.2.2. Triune Model
  - 2.2.3. Bilateral Model
  - 2.2.4. Cognitive Brain and Emotional Brain
  - 2.2.5. Neurons
  - 2.2.6. What Are Neurotransmitters?
- 2.3. Neuroscience and Learning
  - 2.3.1. What Is learning?
  - 2.3.2. Mirror Neurons
  - 2.3.3. Levels of Learning
  - 2.3.4. Learning Styles
  - 2.3.5. Types of Learning
- 2.4. Multiple Intelligences
  - 2.4.1. Definition
  - 2.4.2. Classification
  - 2.4.3. Multiple Intelligences and Neurodidactics
  - 2.4.4. Multiple Intelligences in the Classroom
  - 2.4.5. Advantages and Drawbacks in Education
- 2.5. Neuroscience - Education
  - 2.5.1. Neuroeducation
  - 2.5.2. Memory
  - 2.5.3. Emotion
  - 2.5.4. Attention
  - 2.5.5. Motivation
  - 2.5.6. Contributions of Neurodidactics to Learning Strategies





- 2.6. Neuroscience in the Classroom
  - 2.6.1. The figure of the Neuroeducator
  - 2.6.2. Neuroeducational and Neuropedagogical Importance
  - 2.6.3. Empathic Attitude and Learning
  - 2.6.4. Classroom Applications
  - 2.6.5. Classroom Organization
- 2.7. Playing and New Technologies
  - 2.7.1. Etymology of Playing
  - 2.7.2. Benefits of Playing
  - 2.7.3. Learning by Playing
  - 2.7.4. The Neurocognitive Process
  - 2.7.5. Basic Principles of Educational Games
  - 2.7.6. Neuroeducation and Board Games
  - 2.7.7. Educational Technology and Neuroscience
  - 2.7.8. Development of Executive Functions
- 2.8. Body and Brain
  - 2.8.1. The Connection between Body and Brain
  - 2.8.2. The Social Brain
  - 2.8.3. How Do We Prepare the Brain for Learning?
  - 2.8.4. Diet
  - 2.8.5. Rest and Learning
- 2.9. Neuroscience in Preventing School Failure
  - 2.9.1. Benefits of Neuroscience
  - 2.9.2. Elements in Success-Oriented Pedagogy
  - 2.9.3. Suggestions to Improve Learning Processes
- 2.10. Reason and Emotion
  - 2.10.1. The Binomial Reason and Emotion
  - 2.10.2. What Are Emotions for?
  - 2.10.3. Why Educate Emotions in the Classroom
  - 2.10.4. Effective Learning through Emotions

### Module 3. Neuroeducation

- 3.1. Introduction to Neuroeducation
- 3.2. Primary Neuromyths
- 3.3. Attention
- 3.4. Emotion
- 3.5. Motivation
- 3.6. Learning
- 3.7. Memory
- 3.8. Stimulation and Early Interventions
- 3.9. Importance of Creativity in Neuroeducation
- 3.10. Methodologies that Allow the Transformation of Education into Neuroeducation

### Module 4. Visual and Auditory Functionality for Reading, Language, Languages and Learning

- 4.1. Vision: Functioning and Neuropsychological Bases
  - 4.1.1. Introduction
  - 4.1.2. Development of the Visual System at Birth
  - 4.1.3. Risk Factors
  - 4.1.4. Development of Other Sensory Systems during Infancy
  - 4.1.5. Influence of Vision on the Visuomotor System and Its Development
  - 4.1.6. Normal and Binocular Vision
  - 4.1.7. Anatomy of Human Eyes
  - 4.1.8. Eye Functions
  - 4.1.9. Other Functions
  - 4.1.10. Visual Pathways to the Cerebral Cortex
  - 4.1.11. Elements that Favor Visual Perception
  - 4.1.12. Vision Diseases and Alterations
  - 4.1.13. Most Common Eye Disorders or Diseases: Classroom Interventions
  - 4.1.14. Computer Vision Syndrome (CVS)
  - 4.1.15. Attitudinal Observation of Students
  - 4.1.16. Summary
  - 4.1.17. Bibliographical References
- 4.2. Visual Perception, Assessment and Intervention Programs
  - 4.2.1. Introduction
  - 4.2.2. Human Development: Development of the Sensory Systems
  - 4.2.3. Sensory Perception
  - 4.2.4. Neurodevelopment
  - 4.2.5. Description of the Perceptual Process
  - 4.2.6. Color Perception
  - 4.2.7. Perception and Visual Skills
  - 4.2.8. Evaluation of Visual Perception
  - 4.2.9. Intervention for the Improvement of Visual Perception
  - 4.2.10. Summary
  - 4.2.11. Bibliographical References
- 4.3. Tracking Eye Movements
  - 4.3.1. Introduction
  - 4.3.2. Eye Movements
  - 4.3.3. Tracking Eye Movements
  - 4.3.4. Ocular Motility Recording and Assessment
  - 4.3.5. Ocular Motility-Related Disorders
  - 4.3.6. The Visual System and Reading
  - 4.3.7. Development of Skills in Learning to Read
  - 4.3.8. Improvement and Training Programs and Activities
  - 4.3.9. Summary
  - 4.3.10. Bibliographical References
- 4.4. Saccadic Movements and Their Implication in Reading
  - 4.4.1. Introduction
  - 4.4.2. Models of the Reading Process
  - 4.4.3. Saccadic Movements and Their Relation to Reading
  - 4.4.4. How Are Saccadic Movements Evaluated?
  - 4.4.5. The Reading Process at the Visual Level
  - 4.4.6. Visual Memory in Reading Processes
  - 4.4.7. Investigations to Study the Relationship Between Visual Memory and Reading
  - 4.4.8. Reading Difficulties

- 4.4.9. Specialized Teachers
- 4.4.10. Social Educators
- 4.4.11. Summary
- 4.4.12. Bibliographical References
- 4.5. Visual Accommodation and Its Relation to Posture in the Classroom
  - 4.5.1. Introduction
  - 4.5.2. Mechanisms that Allow for Accommodation or Focus
  - 4.5.3. How Is Visual Accommodation Assessed?
  - 4.5.4. Body Posture in the Classroom
  - 4.5.5. Visual Accommodation Training Programs
  - 4.5.6. Aids for Visually Impaired Students
  - 4.5.7. Summary
  - 4.5.8. Bibliographical References
- 4.6. Structure and Function of the Ear
  - 4.6.1. Introduction
  - 4.6.2. The World of Sound
  - 4.6.3. Sound and Propagation
  - 4.6.4. The Auditory Receptors
  - 4.6.5. Ear Structure
  - 4.6.6. Development of the Hearing System at Birth
  - 4.6.7. Development of Sensory Systems during Infancy
  - 4.6.8. Influence of the Ear on Balance Development
  - 4.6.9. Ear Diseases
  - 4.6.10. Summary
  - 4.6.11. Bibliographical References
- 4.7. Auditory Perception
  - 4.7.1. Introduction
  - 4.7.2. Guidelines for Detecting Auditory Perception Problems
  - 4.7.3. The Perceptive Process
  - 4.7.4. Role of the Auditory Pathways in Perceptual Processes
  - 4.7.5. Children with Impaired Auditory Perception
  - 4.7.6. Evaluation Tests
  - 4.7.7. Summary
  - 4.7.8. Bibliographical References
- 4.8. Evaluation of Hearing and Alterations
  - 4.8.1. Introduction
  - 4.8.2. Evaluation of the External Auditory Canal
  - 4.8.3. Otoscopy
  - 4.8.4. Air Audiometry
  - 4.8.5. Bone Conduction Hearing
  - 4.8.6. Pain Threshold Curve
  - 4.8.7. Tone Audiometry, Vocal Audiometry and Acoustic Audiometry
  - 4.8.8. Hearing Impairment: Degrees and Types of Hearing Loss
  - 4.8.9. Causes of Hearing Loss
  - 4.8.10. Psychobiological Aspects of Hearing Impairment
  - 4.8.11. Summary
  - 4.8.12. Bibliographical References
- 4.9. Hearing and Learning Development
  - 4.9.1. Introduction
  - 4.9.2. Development of the Human Ear
  - 4.9.3. Programs, Activities and Games for Auditory Development in Children
  - 4.9.4. Berard Method
  - 4.9.5. Tomatis Method
  - 4.9.6. Visual and Hearing Health
  - 4.9.7. Adaptations of Curricular Elements
  - 4.9.8. Summary
  - 4.9.10. Bibliographical References
- 4.10. Vision and Hearing Processes Involved in Reading
  - 4.10.1. Introduction
  - 4.10.2. Tracking Eye Movements
  - 4.10.3. The Visual System and Reading
  - 4.10.4. Dyslexia
  - 4.10.5. Color-Based Therapies for Dyslexia
  - 4.10.6. Visual Impairment Aids
  - 4.10.7. Summary
  - 4.10.8. Bibliographical References

- 4.11. Relationship between Vision and Hearing in Language
  - 4.11.1. Introduction
  - 4.11.2. Relationship between Vision and Hearing
  - 4.11.3. Verbal-Auditory and Visual Information Processing
  - 4.11.4. Intervention Programs for Hearing Disorders
  - 4.11.5. Guidelines for Teachers
  - 4.11.6. Summary
  - 4.11.7. Bibliographical References

### Module 5. Motor Skills, Laterality and Writing

- 5.1. Neurodevelopment and Learning
  - 5.1.1. Introduction
  - 5.1.2. Perceptual Development
  - 5.1.3. Neuropsychological Basis of Motor Development
  - 5.1.4. Laterality Development
  - 5.1.5. Interhemispheric Communication through the Corpus Callosum
  - 5.1.6. Ambidextrousness
  - 5.1.7. Summary
  - 5.1.8. Bibliographical References
- 5.2. Psychomotor Development
  - 5.2.1. Introduction
  - 5.2.2. Gross Psychomotricity
  - 5.2.3. General Dynamic Coordination: Basic Skills
  - 5.2.4. Fine Motor Skills and Writing
  - 5.2.5. Psychomotor Development Assessment
  - 5.2.6. Summary
  - 5.2.7. Bibliographical References
- 5.3. Neuropsychology of Motor Development
  - 5.3.1. Introduction
  - 5.3.2. Relationship between Motor and Psychism
  - 5.3.3. Disorders of Motor Development
  - 5.3.4. Coordination Acquisition Disorders



- 5.3.5. Vestibular System Disorders
- 5.3.6. Writing
- 5.3.7. Summary
- 5.3.8. Bibliographical References
- 5.4. Introduction to Laterality Development
  - 5.4.1. Introduction
  - 5.4.2. Laterality Tests
  - 5.4.3. Observation Guidelines for Teachers
  - 5.4.4. Crossed Laterality
  - 5.4.5. Types of Cross Laterality
  - 5.4.6. Relationship between Dyslexia and Laterality
  - 5.4.7. Relationship between Laterality and Attention, Memory and Hyperactivity Problems
  - 5.4.8. Summary
  - 5.4.9. Bibliographical References
- 5.5. Development of Laterality at Different Ages
  - 5.5.1. Introduction
  - 5.5.2. Laterality Definition
  - 5.5.3. Types of Laterality
  - 5.5.4. Corpus Callosum
  - 5.5.5. Cerebral Hemispheres
  - 5.5.6. Development of the Prelateral, Contralateral and Lateral Stages
  - 5.5.7. Summary
  - 5.5.8. Bibliographical References
- 5.6. Motor Disorders and Related Learning Difficulties
  - 5.6.1. Introduction
  - 5.6.2. Motor Disorders
  - 5.6.3. Learning Difficulties
  - 5.6.4. Summary
  - 5.6.5. Bibliographical References
- 5.7. Writing Process and Acquisition
  - 5.7.1. Introduction
  - 5.7.2. Reading Difficulties
  - 5.7.3. Comprehension Problems that Students May Develop
  - 5.7.4. Evolutionary Development of Writing
  - 5.7.5. History of Writing
  - 5.7.6. Neuropsychological Basis of Writing
  - 5.7.7. Teaching Written Expression
  - 5.7.8. Methods of Teaching Writing
  - 5.7.9. Writing Workshops
  - 5.7.10. Summary
  - 5.7.11. Bibliographical References
- 5.8. Dysgraphia
  - 5.8.1. Introduction
  - 5.8.2. Learning Styles
  - 5.8.3. Executive Functions Involved in Learning
  - 5.8.4. Definition of Dysgraphia and Types
  - 5.8.5. Common Indicators of Dysgraphia
  - 5.8.6. Classroom Aids for Students with Dysgraphia
  - 5.8.7. Individual Aids
  - 5.8.8. Summary
  - 5.8.9. Bibliographical References
- 5.9. Contribution of Laterality to the Development of Reading and Writing
  - 5.9.1. Introduction
  - 5.9.2. Importance of Laterality in the Learning Process
  - 5.9.3. Laterality in the Reading and Writing Processes
  - 5.9.4. Laterality and Learning Difficulties
  - 5.9.5. Summary
  - 5.9.6. Bibliographical References

- 5.10. Role of the School Psychologist and Guidance Counselors for Prevention, Development and Learning Difficulties
  - 5.10.1. Introduction
  - 5.10.2. The Guidance Department
  - 5.10.3. Intervention Programs
  - 5.10.4. Advances of Neuropsychology in Learning Difficulties
  - 5.10.5. Training the Teaching Staff
  - 5.10.6. Summary
  - 5.10.7. Bibliographical References
- 5.11. Parent Orientation
  - 5.11.1. How to Inform Parents
  - 5.11.2. Activities to Improve Academic Performance
  - 5.11.3. Activities to Improve Lateral Development
  - 5.11.4. Problem-Solving Strategies
  - 5.11.5. Summary
  - 5.11.6. Bibliographical References
- 5.12. Psychomotor Assessment and Intervention
  - 5.12.1. Introduction
  - 5.12.2. Psychomotor Development
  - 5.12.3. Psychomotor Assessment
  - 5.12.4. Psychomotor Intervention
  - 5.12.5. Summary
  - 5.12.6. Bibliographical References

## Module 6. Research Methodology

- 6.1. Research Methodology
  - 6.1.1. Introduction
  - 6.1.2. The Importance of Research Methodology
  - 6.1.3. Scientific Knowledge
  - 6.1.4. Research Approaches
  - 6.1.5. Summary
  - 6.1.6. Bibliographical References

- 6.2. Choosing the Topic to Research
  - 6.2.1. Introduction
  - 6.2.2. The Issue of Research
  - 6.2.3. Defining the Problem
  - 6.2.4. Choice of the Research Question
  - 6.2.5. Research Objectives
  - 6.2.6. Variables: Types
  - 6.2.7. Summary
  - 6.2.8. Bibliographical References
- 6.3. Research Proposal
  - 6.3.1. Introduction
  - 6.3.2. Research Hypothesis
  - 6.3.3. Feasibility of a Research Project
  - 6.3.4. Research Introduction and Justification
  - 6.3.5. Summary
  - 6.3.6. Bibliographical References
- 6.4. Theoretical Frameworks
  - 6.4.1. Introduction
  - 6.4.2. Designing Theoretical Framework
  - 6.4.3. Resources Used
  - 6.4.4. APA Standards
  - 6.4.5. Summary
  - 6.4.6. Bibliographical References
- 6.5. Bibliography
  - 6.5.1. Introduction
  - 6.5.2. The Importance of Bibliographic References
  - 6.5.3. How to Cite According to APA Standards?
  - 6.5.4. Format of Annexes: Tables and Figures
  - 6.5.5. Bibliography Managers: What Are They? How to Use Them?
  - 6.5.6. Summary
  - 6.5.7. Bibliographical References

- 6.6. Methodological Framework
  - 6.6.1. Introduction
  - 6.6.2. Roadmap
  - 6.6.3. Sections to Be Included in the Methodological Framework
  - 6.6.4. The Population
  - 6.6.5. The Sample
  - 6.6.6. Variables
  - 6.6.7. Instruments
  - 6.6.8. Procedure
  - 6.6.9. Summary
  - 6.6.10. Bibliographical References
- 6.7. Research Designs
  - 6.7.1. Introduction
  - 6.7.2. Types of Designs
  - 6.7.3. Characteristics of the Designs Used in Psychology
  - 6.7.4. Research Designs Used in Education
  - 6.7.5. Research Designs Used in Education Neuropsychology
  - 6.7.6. Summary
  - 6.7.7. Bibliographical References
- 6.8. Quantitative Research I
  - 6.8.1. Introduction
  - 6.8.2. Designing Randomized Groups
  - 6.8.3. Designing Randomized Groups with Blocks
  - 6.8.4. Other Designs used in Psychology
  - 6.8.5. Statistical Techniques in Quantitative Research
  - 6.8.6. Summary
  - 6.8.7. Bibliographical References
- 6.9. Quantitative Research II
  - 6.9.1. Introduction
  - 6.9.2. Unifactorial Intrasubject Designs
  - 6.9.3. Techniques to Control the Effects of Intrasubject Designs
  - 6.9.4. Statistical Techniques
  - 6.9.5. Summary
  - 6.9.6. Bibliographical References
- 6.10. Results
  - 6.10.1. Introduction
  - 6.10.2. How to Gather Data
  - 6.10.3. How to Analyze Data
  - 6.10.4. Statistical Programs
  - 6.10.5. Summary
  - 6.10.6. Bibliographical References
- 6.11. Descriptive Statistics
  - 6.11.1. Introduction
  - 6.11.2. Research Variables
  - 6.11.3. Quantitative Analyses
  - 6.11.4. Qualitative Analyses
  - 6.11.5. Resources
  - 6.11.6. Summary
  - 6.11.7. Bibliographical References
- 6.12. Hypothesis Contrast
  - 6.12.1. Introduction
  - 6.12.2. Statistical Hypotheses
  - 6.12.3. How to Interpret Significance (P-Value)
  - 6.12.4. Criteria for Analyzing Parametric and Non-Parametric Tests
  - 6.12.5. Summary
  - 6.12.6. Bibliographical References
- 6.13. Correlational Statistics and Independence Analysis
  - 6.13.1. Introduction
  - 6.13.2. Pearson Correlation
  - 6.13.3. Spearman's Correlation and Chi-Square
  - 6.13.4. Results
  - 6.13.5. Summary
  - 6.13.6. Bibliographical References

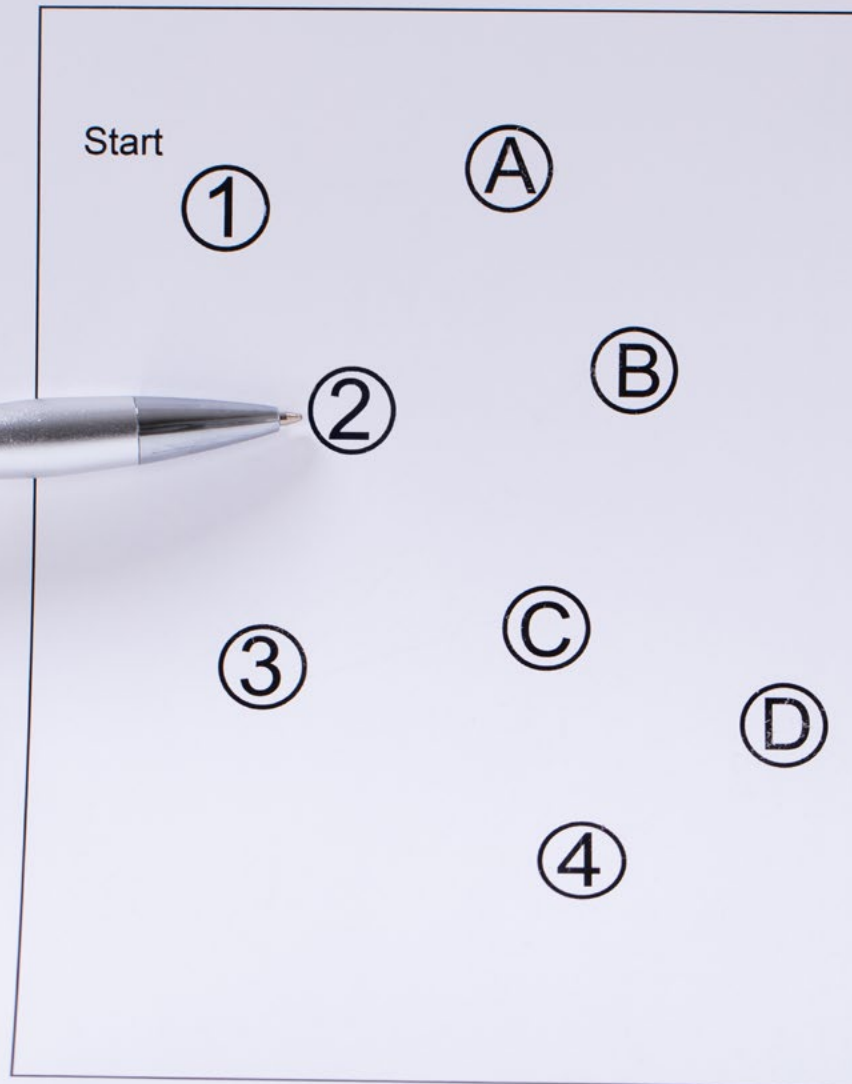
- 6.14. Group Comparison Statistics
  - 6.14.1. Introduction
  - 6.14.2. Mann-Whitney T-Test and Mann-Whitney U-Test
  - 6.14.3. T-Test and Wilcoxon Signed Ranges
  - 6.14.4. The Results
  - 6.14.5. Summary
  - 6.14.6. Bibliographical References
- 6.15. Discussion and Conclusions
  - 6.15.1. Introduction
  - 6.15.2. What Discussion Is
  - 6.15.3. Organizing the Discussion
  - 6.15.4. Conclusions
  - 6.15.5. Limitations and Outlook
  - 6.15.6. Summary
  - 6.15.7. Bibliographical References
- 6.16. Producing a Final Master's Degree Thesis
  - 6.16.1. Introduction
  - 6.16.2. Front Page and Contents
  - 6.16.3. Introduction and Justification
  - 6.16.4. Theoretical Framework
  - 6.16.5. Methodological Framework
  - 6.16.6. The Results
  - 6.16.7. Intervention Program
  - 6.16.8. Discussion and Conclusions
  - 6.16.9. Summary
  - 6.16.10. Bibliographical References

## Module 7. Multiple Intelligences, Creativity, Talent and High Capacities

- 7.1. Theory of Multiple Intelligences
  - 7.1.1. Introduction
  - 7.1.2. Background
  - 7.1.3. Conceptualization
  - 7.1.4. Validation
  - 7.1.5. Premises and Basic Principles of Theories
  - 7.1.6. Neuropsychological and Cognitive Science

- 7.1.7. Classification of the Theories of Multiple Intelligences
- 7.1.8. Summary
- 7.1.9. Bibliographical References
- 7.2. Types of Multiple Intelligences
  - 7.2.1. Introduction
  - 7.2.2. Types of Intelligence
  - 7.2.3. Summary
  - 7.2.4. Bibliographical References
- 7.3. Assessment of Multiple Intelligences
  - 7.3.1. Introduction
  - 7.3.2. Background
  - 7.3.3. Types of Assessments
  - 7.3.4. Aspects to Consider in Assessment
  - 7.3.5. Summary
  - 7.3.6. Bibliographical References
- 7.4. Creativity
  - 7.4.1. Introduction
  - 7.4.2. Concepts and Theories of Creativity
  - 7.4.3. Approaches to the Study of Creativity
  - 7.4.4. Characteristics of Creative Thinking
  - 7.4.5. Types of Creativity
  - 7.4.6. Summary
  - 7.4.7. Bibliographical References
- 7.5. Neuropsychological Basis of Creativity
  - 7.5.1. Introduction
  - 7.5.2. Background
  - 7.5.3. Characteristics of Creative People
  - 7.5.4. Creative Products
  - 7.5.5. Neuropsychological Bases of Creativity
  - 7.5.6. Influence of the Environment and Context on Creativity
  - 7.5.7. Summary
  - 7.5.8. Bibliographical References





- 7.6. Creativity in Educational Contexts
  - 7.6.1. Introduction
  - 7.6.2. Creativity in the Classroom
  - 7.6.3. Stages in the Creative Process
  - 7.6.4. How to Work on Creativity
  - 7.6.5. Connection between Creativity and Thinking
  - 7.6.6. Modification in the Educational Context
  - 7.6.7. Summary
  - 7.6.8. Bibliographical References
- 7.7. Methodologies for Developing Creativity
  - 7.7.1. Introduction
  - 7.7.2. Programs for Developing Creativity
  - 7.7.3. Projects for Developing Creativity
  - 7.7.4. Promoting Creativity in the Family Context
  - 7.7.5. Summary
  - 7.7.6. Bibliographical References
- 7.8. Creativity Assessment and Guidance
  - 7.8.1. Introduction
  - 7.8.2. Considerations on Assessment
  - 7.8.3. Evaluation Tests
  - 7.8.4. Subjective Assessment Tests
  - 7.8.5. Guidance on Assessment
  - 7.8.6. Summary
  - 7.8.7. Bibliographical References
- 7.9. High Capacities and Talents
  - 7.9.1. Introduction
  - 7.9.2. Relationship between Giftedness and High Capacities
  - 7.9.3. Connection between Heredity and Environment
  - 7.9.4. Neuropsychological Foundation
  - 7.9.5. Models of Giftedness
  - 7.9.6. Summary
  - 7.9.7. Bibliographical References

- 7.10. Identification and Diagnosis of High Capacities
  - 7.10.1. Introduction
  - 7.10.2. Main Characteristics
  - 7.10.3. How to Identify High Capacities
  - 7.10.4. Role the Involved Agents
  - 7.10.5. Assessment Tests and Instruments
  - 7.10.6. Intervention Programs
  - 7.10.7. Summary
  - 7.10.8. Bibliographical References
- 7.11. Problems and Difficulties
  - 7.11.1. Introduction
  - 7.11.2. Problems and Difficulties in School Environments
  - 7.11.3. Myths and Beliefs
  - 7.11.4. Desynchronies
  - 7.11.5. Differential Diagnosis
  - 7.11.6. Differences between Genders
  - 7.11.7. Educational Needs
  - 7.11.8. Summary
  - 7.11.9. Bibliographical References
- 7.12. Connection between Multiple Intelligences, High Capacities, Talent and Creativity
  - 7.12.1. Introduction
  - 7.12.2. Connection between Multiple Intelligences and Creativity
  - 7.12.3. Connection between Multiple Intelligences, High Capacities and Talents
  - 7.12.4. Differences between Talent and High Capacities
  - 7.12.5. Creativity, High Capacities and Talent
  - 7.12.6. Summary
  - 7.12.7. Bibliographical References
- 7.13. Guiding and Developing Multiple Intelligences
  - 7.13.1. Introduction
  - 7.13.2. Advising Teachers
  - 7.13.3. Multidimensional Student Development
  - 7.13.4. Curricular Enrichment
  - 7.13.5. Strategies at Different Educational Levels
  - 7.13.6. Summary
  - 7.13.7. Bibliographical References

- 7.14. Creativity for Problem-Solving
  - 7.14.1. Introduction
  - 7.14.2. Models of the Creative Process for Problem-Solving
  - 7.14.3. Creative Project Development
  - 7.14.4. Summary
  - 7.14.5. Bibliographical References
- 7.15. Educational Process and Family Support
  - 7.15.1. Introduction
  - 7.15.2. Guidelines for Teachers
  - 7.15.3. Educational Response in Children
  - 7.15.4. Educational Response in Primary Education
  - 7.15.5. Educational Response in High School
  - 7.15.6. Coordination with Families
  - 7.15.7. Program Implementation
  - 7.15.8. Summary
  - 7.15.9. Bibliographical References

## Module 8. Dyslexia, Dyscalculia and Hyperactivity

- 8.1. History of Learning Difficulties
  - 8.1.1. Introduction
  - 8.1.2. Definition of Learning Difficulties
  - 8.1.3. Historical Development
  - 8.1.4. Current Learning Difficulties
  - 8.1.5. Neuropsychology of Learning Difficulties
  - 8.1.6. Causes of Learning Difficulties
  - 8.1.7. Classification of Learning Difficulties
  - 8.1.8. Summary
  - 8.1.9. Bibliographical References

- 8.2. Conceptualization of Dyslexia
  - 8.2.1. Introduction
  - 8.2.2. Definition
  - 8.2.3. Neuropsychological Bases
  - 8.2.4. Features
  - 8.2.5. Subtypes
  - 8.2.6. Summary
  - 8.2.7. Bibliographical References
- 8.3. Neuropsychological Assessment of Dyslexia
  - 8.3.1. Introduction
  - 8.3.2. Diagnostic Criteria for Dyslexia
  - 8.3.3. How to Assess It
  - 8.3.4. Interview with the Tutor
  - 8.3.5. Reading and Writing
  - 8.3.6. Neuropsychological Assessment
  - 8.3.7. Assessment of Other Related Aspects
  - 8.3.8. Summary
  - 8.3.9. Bibliographical References
- 8.4. Neuropsychological Intervention of Dyslexia
  - 8.4.1. Introduction
  - 8.4.2. Variables Involved
  - 8.4.2. Neuropsychological Field
  - 8.4.3. Intervention Programs
  - 8.4.4. Summary
  - 8.4.5. Bibliographical References
- 8.5. Conceptualization of Dyscalculia
  - 8.5.1. Introduction
  - 8.5.2. Definition of Dyscalculia
  - 8.5.3. Features
  - 8.5.4. Neuropsychological Bases
  - 8.5.5. Summary
  - 8.5.6. Bibliographical References
- 8.6. Neuropsychological Assessment of Dyscalculia
  - 8.6.1. Introduction
  - 8.6.2. Assessment Objectives
  - 8.6.3. How to Assess It?
  - 8.6.4. Report
  - 8.6.5. Diagnosis
  - 8.7.6. Summary
  - 8.6.7. Bibliographical References
- 8.7. Neuropsychological Interventions of Dyscalculia
  - 8.7.1. Introduction
  - 8.7.2. Variables Involved in the Treatment
  - 8.7.3. Neuropsychological Rehabilitation
  - 8.7.4. Intervention in Dyscalculia
  - 8.7.5. Summary
  - 8.7.6. Bibliographical References
- 8.8. Conceptualization of ADHD
  - 8.8.1. Introduction
  - 8.8.2. Definition of ADHD
  - 8.8.3. Neuropsychological Bases
  - 8.8.4. Characteristics of Children with ADHD
  - 8.8.5. Subtypes
  - 8.8.6. Summary
  - 8.8.7. Bibliographical References
- 8.9. Neuropsychological Assessment of ADHD
  - 8.9.1. Introduction
  - 8.9.2. Assessment Objectives
  - 8.9.3. How to Assess It?
  - 8.9.4. Report
  - 8.9.5. Diagnosis
  - 8.9.6. Summary
  - 8.9.7. Bibliographical References

- 8.10. Neuropsychological Interventions of ADHD
  - 8.10.1. Introduction
  - 8.10.2. Neuropsychological Field
  - 8.10.3. Treatment of ADHD
  - 8.10.4. Other Therapies
  - 8.10.5. Intervention Programs
  - 8.10.6. Summary
  - 8.10.7. Bibliographical References
- 8.11. Comorbidity in Neurodevelopmental Disorders
  - 8.11.1. Introduction
  - 8.11.2. Neurodevelopment Disorders
  - 8.11.3. Dyslexia and Dyscalculia
  - 8.11.4. Dyslexia and ADHD
  - 8.11.5. Dyscalculia and ADHD
  - 8.11.6. Summary
  - 8.11.7. Bibliographical References
- 8.12. Neurotechnology
  - 8.12.1. Introduction
  - 8.12.2. Applied to Dyslexia
  - 8.12.3. Applied to Dyscalculia
  - 8.12.4. Applied to ADHD
  - 8.12.5. Summary
  - 8.12.6. Bibliographical References
- 8.13. Guidance for Parents and Teachers
  - 8.13.1. Introduction
  - 8.13.2. Guidance on Dyslexia
  - 8.13.3. Guidance on Dyscalculia
  - 8.13.4. Guidance on ADHD
  - 8.13.5. Summary
  - 8.13.6. Bibliographical References

## Module 9. Neurolinguistic Processes, Difficulties and Intervention Programs

- 9.1. Neurobiological Basis Involved in Language
  - 9.1.1. Introduction
  - 9.1.2. Language Definitions
  - 9.1.3. Historical Background
  - 9.1.4. Summary
  - 9.1.5. Bibliographical References
- 9.2. Language Development
  - 9.2.1. Introduction
  - 9.2.2. Appearance of Language
  - 9.2.3. Acquisition of Language
  - 9.2.4. Summary
  - 9.2.5. Bibliographical References
- 9.3. Neuropsychological Approaches to Language
  - 9.3.1. Introduction
  - 9.3.2. Brain Processes of Language
  - 9.3.3. Brain Areas Involved
  - 9.3.4. Neurolinguistic Processes
  - 9.3.5. Brain Centers Involved in Comprehension
  - 9.3.6. Summary
  - 9.3.7. Bibliographical References
- 9.4. Neuropsychology of Language Comprehension
  - 9.4.1. Introduction
  - 9.4.2. Brain Areas Involved in Comprehension
  - 9.4.3. Sounds
  - 9.4.4. Syntactic Structures for Linguistic Comprehension
  - 9.4.5. Semantic Processes and Meaningful Learning
  - 9.4.6. Reading Comprehension
  - 9.4.7. Summary
  - 9.4.8. Bibliographical References



- 9.5. Communication through Language
  - 9.5.1. Introduction
  - 9.5.2. Language as a Tool for Communication
  - 9.5.3. Evolution of Language
  - 9.5.4. Social Communication
  - 9.5.5. Summary
  - 9.5.6. Bibliographical References
- 9.6. Language Disorders
  - 9.6.1. Introduction
  - 9.6.2. Speech and Language Disorders
  - 9.6.3. Professionals Involved in the Treatment
  - 9.6.4. Classroom Implications
  - 9.6.5. Summary
  - 9.6.6. Bibliographical References
- 9.7. Aphasia
  - 9.7.1. Introduction
  - 9.7.2. Types of Aphasia
  - 9.7.3. Diagnosis
  - 9.7.4. Assessment
  - 9.7.5. Summary
  - 9.7.6. Bibliographical References
- 9.8. Language Stimulation
  - 9.8.1. Introduction
  - 9.8.2. Importance of Language Stimulation
  - 9.8.3. Phonetic-Phonological Stimulation
  - 9.8.4. Lexical-Semantic Stimulation
  - 9.8.5. Morphosyntactic Stimulation
  - 9.8.6. Pragmatic Stimulation
  - 9.8.7. Summary
  - 9.8.8. Bibliographical References

- 9.9. Reading and Writing Disorders
  - 9.9.1. Introduction
  - 9.9.2. Delayed Reading
  - 9.9.3. Dyslexia
  - 9.9.4. Dysorthography
  - 9.9.5. Dysgraphia
  - 9.9.6. Dyslalia
  - 9.9.7. Treatment of Reading and Writing Disorders
  - 9.9.8. Summary
  - 9.9.9. Bibliographical References
- 9.10. Evaluation and Diagnosis of Language Difficulties
  - 9.10.1. Introduction
  - 9.10.2. Language Evaluation
  - 9.10.3. Language Assessment Procedures
  - 9.10.4. Psychological Tests for Assessing Language
  - 9.10.5. Summary
  - 9.10.6. Bibliographical References
- 9.11. Intervention in Language Disorders
  - 9.11.1. Introduction
  - 9.11.2. Implementation of Improvement Programs
  - 9.11.3. Improvement Programs
  - 9.11.4. Improvement Programs Using New Technologies
  - 9.11.5. Summary
  - 9.11.6. Bibliographical References
- 9.12. Incidence of Language Difficulties on Academic Performance
  - 9.12.1. Introduction
  - 9.12.2. Linguistic Processes
  - 9.12.3. Incidence of Language Disorders
  - 9.12.4. Relationship between Hearing and Language
  - 9.12.5. Summary
  - 9.12.6. Bibliographical References

- 9.13. Guidance for Parents and Teachers
  - 9.13.1. Introduction
  - 9.13.2. Language Stimulation
  - 9.13.3. Reading Stimulation
  - 9.13.4. Summary
  - 9.13.5. Bibliographical References

## Module 10. Emerging Educational Alternatives in the Management of Learning Difficulties

- 10.1. Introduction
- 10.2. Information and Communication Technologies (ICT)
  - 10.2.1. Theoretical Fundamentals of ICT
  - 10.2.2. Historical Development of ICT
  - 10.2.3. Classification of ICT
    - 10.2.3.1. Synchronous
    - 10.2.3.2. Asynchronous
  - 10.2.4. ICT Features
  - 10.2.5. Potential of ICT in Different Social Contexts
- 10.3. ICT in Educational Environments
  - 10.3.1. Contribution of ICT to Education in General
    - 10.3.1.1. Tradition Education and ICT Incorporation
    - 10.3.1.2. Impact of ICT in 21st Century Education
    - 10.3.1.3. Learning and Teaching with ICT: Expectations, Realities and Potential
  - 10.3.2. ICT Approaches in the Care of Learning Difficulties
    - 10.3.2.1. ICT as an Educational Resource for the Care of Learning Difficulties
      - 10.3.2.1.1. Teaching Reading
      - 10.3.2.1.2. Teaching Writing
      - 10.3.2.1.3. Teaching Mathematics
      - 10.3.2.1.4. Attention Deficit Hyperactivity Disorder (ADHD)
  - 10.3.3. Role of the Teacher in ICT Use
    - 10.3.3.1. In the Classroom
    - 10.3.3.2. Out-of-Classroom Spaces

- 10.4. Chess and Pedagogical Value
  - 10.4.1. Brief Historical Review of Chess
  - 10.4.2. Playful Nature
  - 10.4.3. Pedagogical Fundamentals of Play-Science
  - 10.4.4. Chess as an Educational Tool: In the School Context and in Socially Vulnerable Environments
  - 10.4.5. Potentials of Chess in the Teaching- Learning Process of Students with Learning Difficulties
    - 10.4.5.1. Contributions of Chess in Cognitive Activity
      - 10.4.5.1.1. Attention Span
      - 10.4.5.1.2. Memory
      - 10.4.5.1.3. Motivation
      - 10.4.5.1.4. Managing Emotions
      - 10.4.5.1.5. Strategic Thinking
      - 10.4.5.1.6. Intelligence
      - 10.4.5.1.7. Transfer of Learning
    - 10.4.5.2. Contributions of Chess in the Context of Executive Functions
      - 10.4.5.2.1. Organisation
      - 10.4.5.2.2. Planning
      - 10.4.5.2.3. Execution (Planning, Inhibitory Control, and Self-Monitoring)
      - 10.4.5.2.4. Evaluation / Review
- 10.5. Chess as a Binding Element of the School-Family-Community Triad in the Management of Learning Disabilities
  - 10.5.1. Strengths in the Use of Chess in School to Promote Family Participation in Educational Processes
  - 10.5.2. Possibilities Chess Offers to Promote Participation of the Community in Schools
- 10.6. Meditation: From Spiritual Practice to Current Expansion
  - 10.6.1. A Brief Approach to Meditation as an Educational Tool
    - 10.6.1.1. Concept of Meditation
    - 10.6.1.2. Origin of Meditation
    - 10.6.1.3. Expansion into Different Fields
- 10.7. Educational Potential of Meditation to Manage Learning Difficulties and Attention to Diversity
  - 10.7.1. Scientific Evidence of the Effects of Meditation on the Body, Brain and Interpersonal Relationships
    - 10.7.1.1. Neurological Effects: Structural, Biochemical and Functional in the Brain
    - 10.7.1.2. Psychological Effects
    - 10.7.1.3. Physical Effects
  - 10.7.2. Impact of Meditation Practice in Schoolchildren
  - 10.7.3. Impact of Meditation on Teacher Modes of Operation
  - 10.7.4. Impact of Meditation Practice in School Environment
- 10.8. Activities for the Integration of Knowledge and Practical Application
- 10.9. Recommended Reading
- 10.10. Bibliography



*A complete specialization program  
to gain the knowledge you need to  
compete among the best”*

06

# Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach: **Relearning**.

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the **New England Journal of Medicine** have considered it to be one of the most effective.





“

*Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"*

## At TECH we use the Case Method

What should a professional do in a given situation? Throughout the program, students will face multiple simulated clinical cases, based on real patients, in which they will have to do research, establish hypotheses, and ultimately resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method. Specialists learn better, faster, and more sustainably over time.

*With TECH the psychologist experiences a way of learning that is shaking the foundations of traditional universities around the world.*



According to Dr. Gérvas, the clinical case is the annotated presentation of a patient, or group of patients, which becomes a "case", an example or model that illustrates some peculiar clinical component, either because of its teaching power or because of its uniqueness or rarity. It is essential that the case is based on current professional life, trying to recreate the real conditions in the psychologist's professional practice.

“

*Did you know that this method was developed in 1912, at Harvard, for law students? The case method consisted of presenting students with real-life, complex situations for them to make decisions and justify their decisions on how to solve them. In 1924, Harvard adopted it as a standard teaching method”*

The effectiveness of the method is justified by four fundamental achievements:

1. Psychologists who follow this method not only master the assimilation of concepts, but also develop their mental capacity by means of exercises to evaluate real situations and apply their knowledge.
2. Learning is solidly translated into practical skills that allow the psychologist to better integrate knowledge into clinical practice.
3. Ideas and concepts are understood more efficiently, given that the example situations are based on real-life.
4. Students like to feel that the effort they put into their studies is worthwhile. This then translates into a greater interest in learning and more time dedicated to working on the course.



## Relearning Methodology

At TECH we enhance the case method with the best 100% online teaching methodology available: Relearning.

Our university is the first in the world to combine the study of clinical cases with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, which is a real revolution compared to the simple study and analysis of cases.

*The psychologist will learn through real cases and by solving complex situations in simulated learning environments. These simulations are developed using state-of-the-art software to facilitate immersive learning.*



At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

This methodology has trained more than 150,000 psychologists with unprecedented success in all clinical specialties. Our pedagogical methodology is developed in a highly competitive environment, with a university student body with a strong socioeconomic profile and an average age of 43.5 years old.

*Relearning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for success.*

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and relearn). Therefore, we combine each of these elements concentrically.

The overall score obtained by our learning system is 8.01, according to the highest international standards.



This program offers the best educational material, prepared with professionals in mind:



#### Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.



#### Latest Techniques and Procedures on Video

TECH introduces students to the latest techniques, to the latest educational advances, to the forefront of current psychology. All of this in direct contact with students and explained in detail so as to aid their assimilation and understanding. And best of all, you can watch the videos as many times as you like.



#### Interactive Summaries

The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".



#### Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





#### Expert-Led Case Studies and Case Analysis

Effective learning ought to be contextual. Therefore, TECH presents real cases in which the expert will guide students, focusing on and solving the different situations: a clear and direct way to achieve the highest degree of understanding.



#### Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.



#### Classes

There is scientific evidence suggesting that observing third-party experts can be useful.

Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.



#### Quick Action Guides

TECH offers the most relevant contents of the course in the form of worksheets or quick action guides. A synthetic, practical, and effective way to help students progress in their learning.



07

# Certificate

The Professional Master's Degree in Neuropsychology and Education guarantees you, in addition to the most rigorous and updated training, access to a Professional Master's Degree issued by TECH Technological University.







“

*Successfully complete this program  
and receive your university degree  
without travel or laborious paperwork”*

This **Professional Master's Degree in Neuropsychology and Education** contains the most complete and up-to-date program on the market.

After the student has passed the assessments, they will receive their corresponding **Professional Master's Degree** issued by **TECH Technological University** via tracked delivery\*.

The diploma issued by **TECH Technological University** will reflect the qualification obtained in the Professional Master's Degree, and meets the requirements commonly demanded by labor exchanges, competitive examinations, and professional career evaluation committees.

Title: **Professional Master's Degree in Neuropsychology and Education**

Official N° of hours: **1,500 h.**



\*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH EDUCATION will make the necessary arrangements to obtain it, at an additional cost.

future  
health confidence people  
education information tutors  
guarantee accreditation teaching  
institutions technology learning  
community commitment  
personalized service innovation  
knowledge present quality  
development language  
virtual classroom



Professional Master's  
Degree  
Neuropsychology  
and Education

- » Modality: online
- » Duration: 12 months
- » Certificate: TECH Technological University
- » Dedication: 16h/week
- » Schedule: at your own pace
- » Exams: online

# Professional Master's Degree Neuropsychology and Education

