



## Postgraduate Certificate

## Assessment and Treatment of Voice Disorders

» Modality: online

» Duration: 12 weeks

» Certificate: TECH Technological University

» Dedication: 16h/week

» Schedule: at your own pace

» Exams: online

Website: www.techtitute.com/us/education/postgraduate-certificate/assessment-treatment-voice-disorders

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Certificate

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# 01 Introduction





## tech 06 | Introduction

Alterations in the structure of the vocal cords produce Voice Disorders ranging from Aphonia to Dysphonia. These voice problems are very common in patients with neurological disorders and considerably affect their quality of life. Therefore, in the school environment, it is necessary to work with accurate diagnostic methods to determine the need of the affected individual and thus work in the rehabilitation process indicated.

This Postgraduate Certificate in Assessment and Treatment of Voice Disorders responds to a demand, within the educational sector, increasingly wider due to the access to information and advances in science and technology. In this sense, it is proper for professionals to acquire new knowledge that will allow them to treat organic and functional dysphonia. In this program you will find a complete proposal of exercises and techniques according to the rehabilitation objective.

They will also be prepared for the assessment of Vocal Quality and the realization of a clinical history, where there is a report of the initial and evolutionary evaluation of the affected by the voice disorder. They will review anatomical and physiological aspects of the voice, respiratory structures involved in phonation, among other various aspects that are raised in a teaching load of 2 modules of study. These can be completed in 12 weeks, completely online and from the comfort of your favorite device.

This Postgraduate Certificate in Assessment and Treatment of Voice Disorders contains the most complete and up-to-date educational program on the market" Its most notable features are:

- The development of practical cases presented by experts in NSpeech Neurorehabilitation and Orofacial Therapy
- The graphic, schematic, and practical content with which they are created, provides scientific and practical information on the disciplines that are essential for professional practice
- Practical exercises where self-assessment can be used to improve learning
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection



Update your knowledge in an easy and effective way thanks to the most modern methodology and technology in the current pedagogical field"



The program's teaching staff includes professionals from the industry who contribute their work experience to this program, as well as renowned specialists from leading societies and prestigious universities.

The multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide immersive education programmed to learn in real situations.

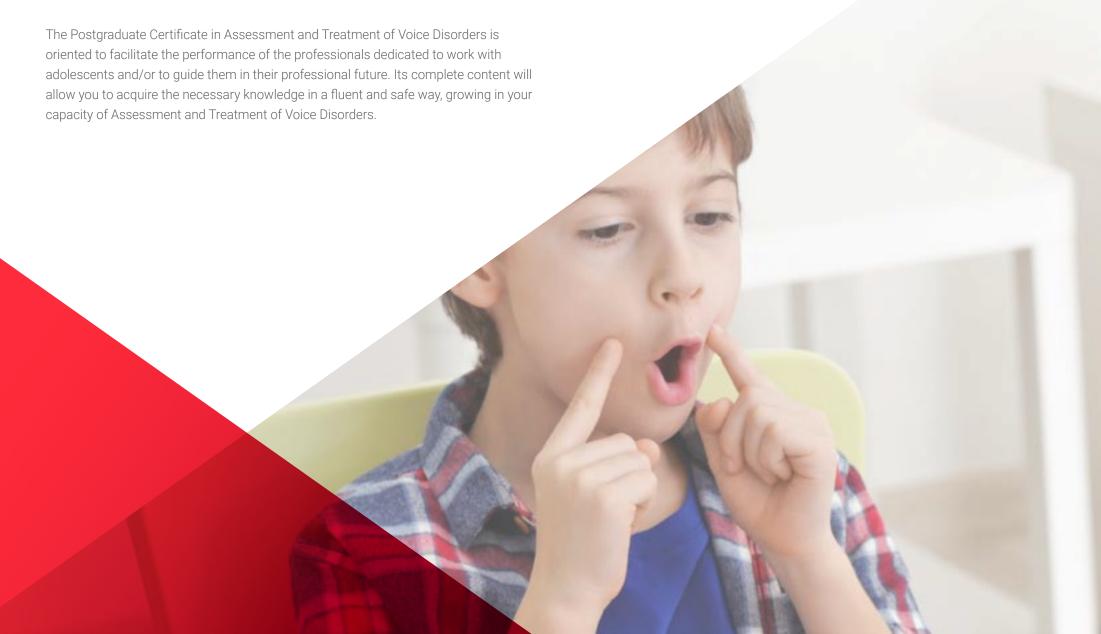
This program is designed around Problem-Based Learning, whereby students must try to solve the different professional practice situations that arise throughout the program. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

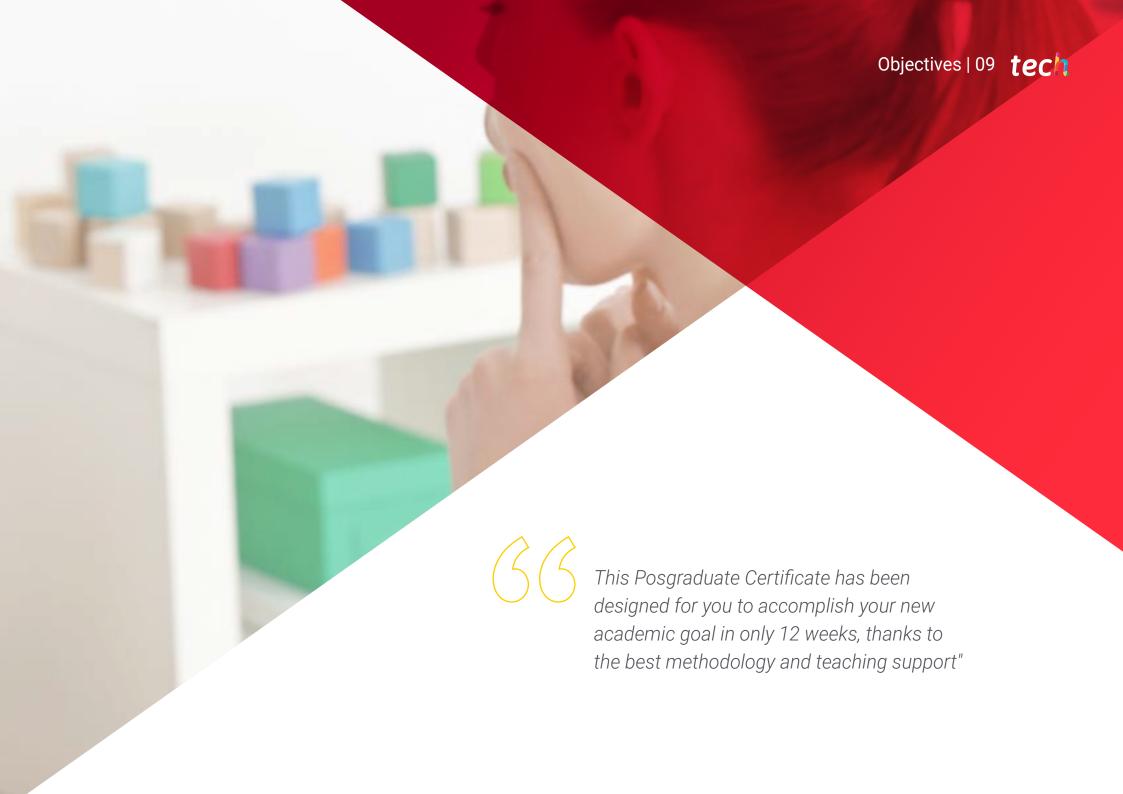
You will gain deeper understanding of the Anatomical and Physiological aspects of the Voice.

Get up to date and start intervening with the assurance of a complete learning experience, which will provide you with new tools for the approach to Voice Disorders.









## tech 10 | Objectives



## **General Objectives**

- Develop a broad body of knowledge of the anatomical and functional basis of the central and peripheral nervous system
- Study the anatomy and function of the organs involved in basic functions such as respiration, phonation and swallowing
- Acquire knowledge in both assessment and speech therapy intervention
- Delve into rehabilitation techniques supported by clinical practice
- Develop intervention skills acquired from complementary disciplines such as neuropsychology, physiotherapy and psychology
- Become proficient in the assessment, diagnosis and treatment of neurofunctional and logopedic disorders in specific groups with neurodevelopmental or syndromic disorders
- Know various approaches and intervention programs in neurological and speech therapy neurorehabilitation



Delve into the knowledge of the most current diagnostic and treatment techniques for the Assessment and Treatment of Voice Disorders"





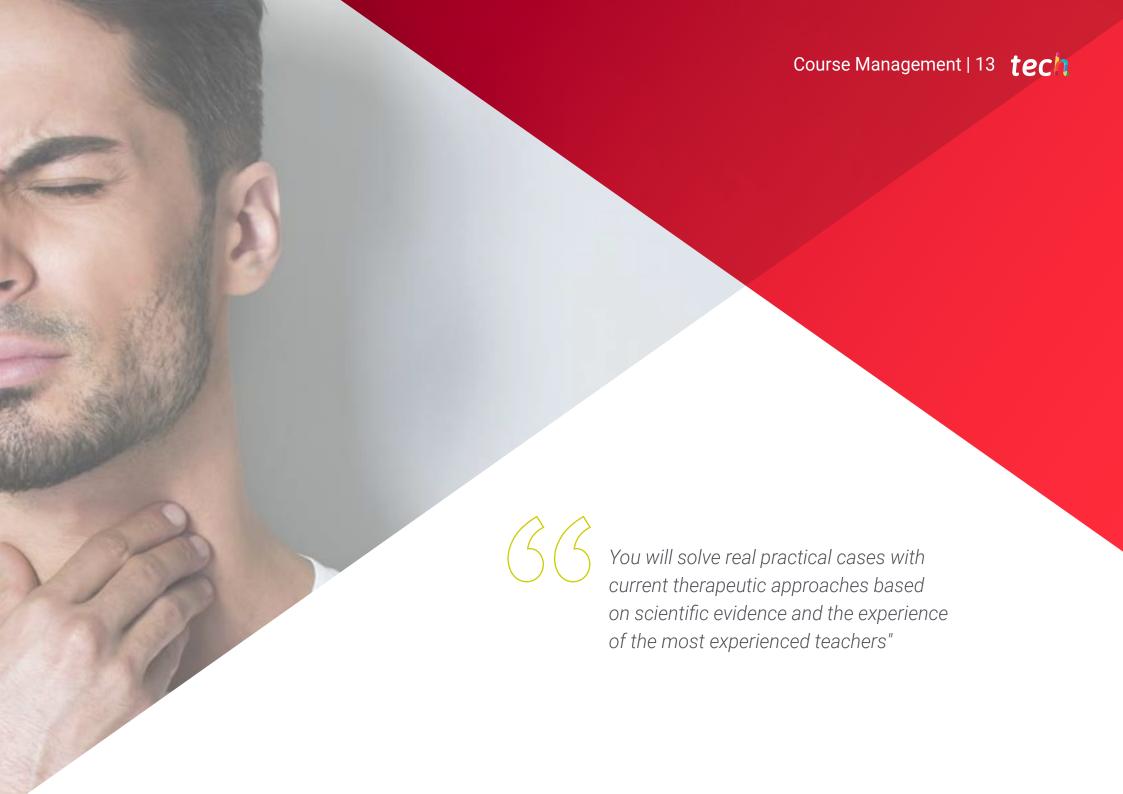


### **Specific Objectives**

- Learn how to implement a correct and complete assessment of vocal function in daily clinical practice
- Learn the specific anatomical and functional aspects of the phonatory system as a basis for the rehabilitation of vocal pathologies and for vocal work with voice professionals
- Know the most important features of the voice and learn to listen to different types of voices in order to know which aspects are altered to guide clinical practice
- Gain in-depth knowledge of the most current diagnostic and treatment techniques
- Analyze the different possible vocal pathologies and achieve scientific rigor in treatments
- Solve real case studies with current therapeutic approaches based on scientific evidence
- Delve into the knowledge and analysis of the results obtained in objective voice assessments
- Learn about different approaches to the treatment of vocal pathologies
- Raise awareness of the need for vocal care
- View the voice as a global ability of the person and not as an exclusive act of the phonatory system



With the aim of showing the maximum actuality in each of the contents of this program, TECH has gathered a team of professional experts in the area of Speech Therapy Rehabilitation and other specific areas. They, from their own experience, will teach the most relevant and necessary aspects to address the Assessment and Treatment of Voice Disorders in an effective and appropriate way to the needs of each patient, within the school environment.



## tech 14 | Course Management

#### Management



#### Mr. Borrás Sanchís, Salvador

- Psychologist, Teacher and Speech Therapist
- Educational Counselor at Generalitat Valenciana, Consejería de Educación (Valencian Regional Government)
- Abile Education Specialist
- Avance SL Partner
- Pedagogical Advisor and External Collaborator of Aula Salud (an organization to promote health in the classroom).
- Pedagogical Director in iteNlearning
- Author of "Guide for the Reeducation of Atypical Swallowing and Associated Disorders"
- Pedagogical Director in the Instituto DEIAP (Institute for Comprehensive Development and Psychoeducational Care).
- Degree in Psychology
- Hearing and Speech Teacher
- Diploma in Speech Therapy



#### Ms. Santacruz García, Estefanía

- Social integrator and clinical speech therapist at Uner La Clinic.
- Teacher at CEFIRE
- Specialist in Orofacial and Myofunctional Therapy

#### **Professors**

#### Ms. Navarro Marhuenda, Laura

- Neuropsychologist at Kinemas
- Specialist in Child and Adult Neurorehabilitation in Integral Center of Brain Injury
- Master's Degree in Speech Neurorehabilitation and Vital Function Analysis
- Neuropsychologist at INEURO
- Neuropsychologist at UNER CLINIC
- Degree in Psychology from the Miguel Hernández University of Elche
- Master's Degree in Health Psychology from the Miguel Hernández University of Elche
- Master's Degree in Clinical Neuropsychology from the European University Miguel de Cervantes
- Master's Degree in Pediatric Neurology and Neurodevelopment by CEU Cardena Herrera University

#### Ms. López Samper, Belén

- General Health Psychology and Clinical Neuropsychologist
- Psychologist. Alcaraz Institute
- Psychologist. IDEAT Center
- Neuropsychologist Clínica UNER Assessment and Integral Rehabilitation of Brain Injury
- Specialized in Child and Adult Neurorehabilitation at the Integral Center for Brain Injury
- Master's Degree in Special Educational Needs and Early Care, Developmental and Child Psychology. International University of Valencia
- Master's Degree in Clinical Neuropsychology, Neuropsychology. AEPCCC
- Master's Degree in General Health Psychology. International University of Valencia
- Degree in Psychology. Miguel Hernández University of Elche

## tech 16 | Course Management

#### Dr. Carrasco de Larriva, Concha

- Psychologist at PEROCA
- Clinical Neuropsychologist accredited by the General Council of Psychology in Spain
- Assistant Professor of the Department of Psychology at the Catholic University San Antonio of Murcia
- Degree in Psychology from the University of Granada
- Master's Degree in Clinical Neuropsychology by the Spanish Association of Clinical Cognitive Behavioral Psychology
- Postgraduate degree in Cognitive Rehabilitation from ISEP
- Expert in Child and Cognitive Rehabilitation by the Francisco de Vitoria University
- Qualified for the assessment of Autism with the Autism Diagnostic Observation Scale ADOS

#### Ms. Jiménez Jiménez, Ana

- Clinical Neuropsychologist and Social Worker
- Clinical Neuropsychologist at Integra Cerebral Damage
- Neuropsychologist at UNER Clinic
- \* Educator of the Social Action Team Murcia in Cáritas Spain.
- Degree in Social Work at the University of Murcia
- Degree in Psychology from UNED
- Master's Degree in Clinical Neuropsychology from the European University Miguel de Cervantes
- Master's Degree in General Health Psychology by UNED

#### Ms. Álvarez Valdés, Paula del Carmen

- Clinical Speech Therapist Specialist in Myofunctional Therapy
- Clinical Speech Therapist Specialist in Myofunctional Therapy
- Diploma in Psychodiagnosis and Early Care Treatment
- Direct collaboration in Dental Office
- Master's Degree in Special Education and in Foreign Languages from the Pontifical University of Salamanca
- ISEP Master's Degree in Myofunctional Therapy

#### Ms. Selva Cabañero, Pilar

- Nurse Specialist in Obstetric-Gynecological Nursing (Midwife)
- Obstetric-Gynecological Nursing Teaching Unit, University of Murcia Santa Lucía General University Hospital
- Publication, Ankyloglossia and the Success of Breastfeeding, ISBN13: 978-84-695-5302-2. 2012

#### Ms. Sanz Pérez, Nekane

- Clinical Speech Therapist specialized in Acquired Cerebral Palsy
- Teacher in Iberocardio for Aspace (Main Confederation and Entity for Cerebral Palsy Care in Spain)

#### Ms. Martín Bielsa, Laura

- Speech Therapist Expert in Speech Pathology, Child Development and Early Childhood Attention
- Diploma in Teaching and Dean of the Professional Association of Speech Therapists of Aragon
- Director of the Master's Degree in Vocal Therapy, Cardenal Herrera University



## Course Management | 17 tech

#### Ms. Muñoz Boje, Rocío

- Occupational Therapist Specialist in Neurorehabilitation at the Uner Clinic
- Degree in Occupational Therapy
- Occupational Therapist Specialist in Neurorehabilitation

#### Ms. García Gómez, Andrea

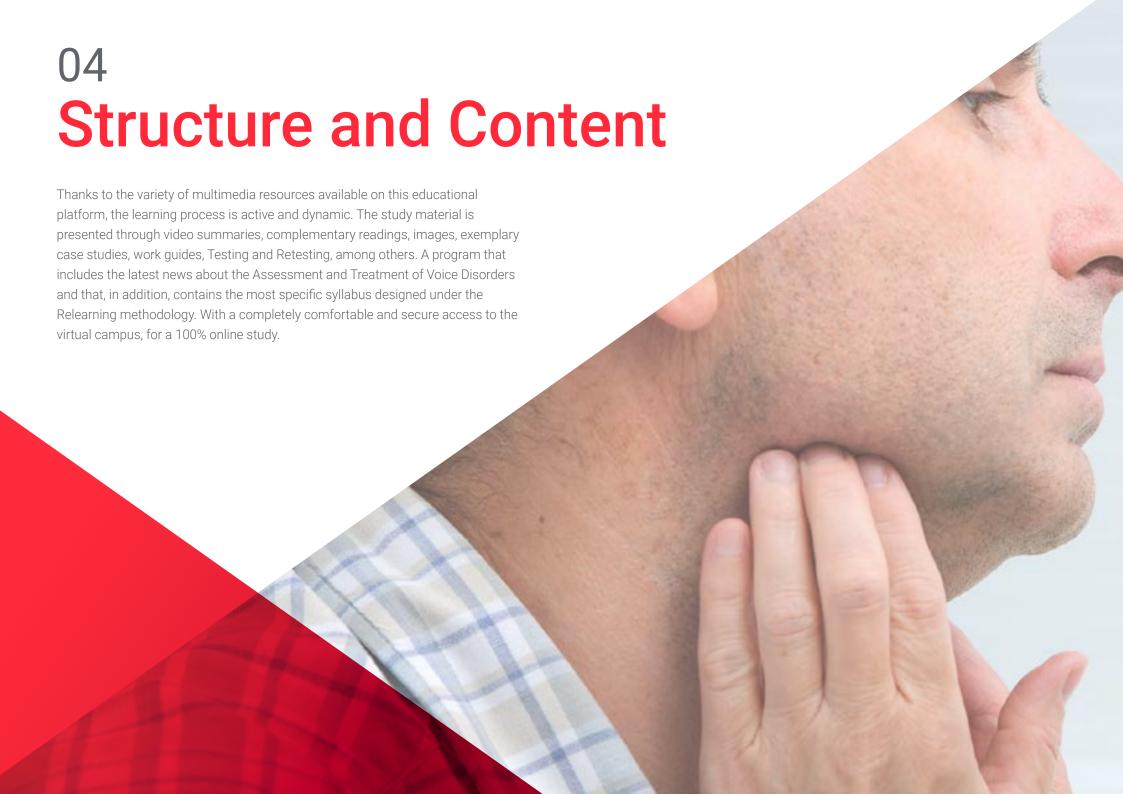
- Speech therapist specialized in Acquired Brain Injury Neurorehabilitation
- Speech therapist at UNER Clinic
- Speech therapist at Integra Brain Injury
- Speech therapist at Ineuro
- Graduate in Speech Therapy
- Master's Degree in Speech Therapy Neurorehabilitation in Acquired Brain Injury

#### Ms. Santacruz García, Raquel

- Specialist in Pedagogy and Nutrition.
- Dietician of the Hispanic Ballet Company
- Dancer at the Andalusian Dance Center
- Graduate in Human Nutrition and Dietetics by the Catholic University San Antonio
- Specialist in Dance Pedagogy by the Theatre Institute of Barcelona
- Intermediate Degree in Classical Dance at the Conservatory of Murcia

#### Ms. Gallego Díaz, Mireia

- Hospital Speech Therapist
- Occupational Therapist
- Speech Therapist Expert in Swallowing Disorders





## tech 20 | Structure and Content

#### Module 1. Anatomy and Physiology of the Voice. Vocal Chord Status

- 1.1. Voice Anatomy
  - 1.1.1. Laryngeal Anatomy
  - 1.1.2. Respiratory Structures Involved in Phonation
    - 1.1.2.1. Chest
    - 1.1.2.2. Airway
    - 1.1.2.3. Respiratory Musculature
  - 1.1.3. Laryngeal Structures Involved in Phonation
    - 1.1.3.1. Laryngeal Skeleton
    - 1.1.3.2. Cartilage
    - 1.1.3.3. Joints
    - 1.1.3.4. Musculature
    - 1.1.3.5. Innervation
  - 1.1.4. Structures of the Vocal Tract Involved in Phonation
    - 1.1.4.1. Linear Source-Filter Model
    - 1.1.4.2. Non-Linear Source-Filter Model
- 1.2. Voice Physiology
  - 1.2.1. Histology of Vocal Folds
  - 1.2.2. Biomechanical Properties of the Vocal Folds
  - 1.2.3. Myoelastic Mucoondulatory Theory and Aerodynamic Theory
- 1.3. Pathological Voice
  - 1.3.1. Euphonia vs. Dysphonia
  - 1.3.2. Vocal Fatigue
  - 1.3.3. Acoustic Signs of Dysphonia
  - 1.3.4. Classification of Dysphonia
- 1.4. Medical- Surgical Treatment
  - 1.4.1. Phonosurgery
  - 1.4.2. Laryngeal Surgery
  - 1.4.3. Medication in Dysphonia

- 1.5. Physi.cal and Acoustic Aspects
  - 1.5.1. Physical Aspects of the Voice
    - 1.5.1.1. Types of Waves
    - 1.5.1.2. Physical Properties of Sound Waves: Amplitude and Frequency
    - 1.5.1.3. Transmission of Sound
  - 1.5.2. Acoustic Voice Aspects
    - 1.5.2.1. Intensity
    - 1.5.2.2. Pitch
    - 1.5.2.3. Quality
- 1.6. Objective Voice Assessment
  - 1.6.1. Morphofunctional Exploration
  - 1.6.2. Electroglottography
  - 1.6.3. Aerodynamic Measures
  - 1.6.4. Electromyography
  - 1.6.5. Videochemography
  - 1.6.6. Acoustic Analysis
- 1.7. Perceptual Assessment
  - 1.7.1. GRBAS
  - 1.7.2. RASAT
  - 173 GBR Score
  - 1.7.4. CAPE-V
  - 1.7.5. VPAS
- 1.8. Functional Assessment
  - 1.8.1. Fundamental Frequency
  - 1.8.2. Phonetogram
  - 1.8.3. Maximum Phonatory Times
  - 1.8.4. Velo-Palatine Efficiency
  - 1.8.5. VHI
- .9. Assessing Vocal Quality
  - 1.9.1. Vocal Quality
  - 1.9.2. High Vocal Quality vs. Low Vocal Quality
  - 1.9.3. Vocal Quality Assessment in Voice Professionals

- 1.10. Medical History
  - 1.10.1. The Importance of Medical History
  - 1.10.2. Characteristics of the Initial Interview
  - 1.10.3. Medical History Sections and Voice Implications
  - 1.10.4. Proposal of a Model of Anamnesis for Vocal Pathology

#### Module 2. Vocal Rehabilitation

- 2.1. Speech Therapy Treatment for Functional Dysphonias
  - 2.1.1. Type I: Isometric Laryngeal Disorder
  - 2.1.2. Type II: Glottic and Supraglottic Lateral Contraction
  - 2.1.3. Type III: Anteroposterior Supraglottic Contraction
  - 2.1.4. Type IV: Conversion Aphonia/Dysphonia and Psychogenic Dysphonia with Arched Vocal Cords
  - 2.1.5. Transitional Adolescent Dysphonia
- 2.2. Speech Therapy Treatment for Organic Dysphonias
  - 2.2.1. Introduction
  - 2.2.2. Speech Therapy in Congenital Origin Dysphonias
  - 2.2.3. Speech Therapy in Acquired Origin Dysphonias
- 2.3. Speech Therapy Treatment for Organic-Functional Dysphonias
  - 2.3.1. Introduction
  - 2.3.2. Objectives in the Rehabilitation of Organic-Functional Pathologies
  - 2.3.3. Proposal of Exercises and Techniques according to the Rehabilitation Objective
- 2.4. Voice in Acquired Neurological Problems
  - 2.4.1. Dysphonias of Neurological Origin
  - 2.4.2. Speech Therapy Treatment
- 2.5. Child Dysphonia
  - 2.5.1. Anatomical Characteristics
  - 2.5.2 Vocal Characteristics
  - 253 Intervention
- 2.6. Hygiene Therapy
  - 2.6.1. Introduction
  - 2.6.2. Harmful Habits and Their Effect on the Voice
  - 2.6.3. Preventive Measures

- 2.7. Semi-Occluded Vocal Tract Exercises
  - 2.7.1. Introduction
  - 2.7.2. Justification
  - 2.7.3. TVSO
- 2.8. Estill Voice Training
  - 2.8.1. Jo Estill and the Creation of the Model
  - 2.8.2. Principles of Estill Voice Training
  - 2.8.3. Description



Evolve from the hands of experts in Evaluation and Treatment of Voice Disorders 100% online and at your own pace"





## tech 24 | Methodology

#### At TECH Education School we use the Case Method

In a given situation, what should a professional do? Throughout the program students will be presented with multiple simulated cases based on real situations, where they will have to investigate, establish hypotheses and, finally, resolve the situation. There is an abundance of scientific evidence on the effectiveness of the method.

With TECH, educators can experience a learning methodology that is shaking the foundations of traditional universities around the world.



It is a technique that develops critical skills and prepares educators to make decisions, defend their arguments, and contrast opinions.



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:

- Educators who follow this method not only grasp concepts, but also develop their mental capacity, by evaluating real situations and applying their knowledge.
- 2. The learning process is solidly focused on practical skills that allow educators to better integrate the knowledge into daily practice.
- **3.** Ideas and concepts are understood more efficiently, given that the example situations are based on real-life teaching.
- **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.



## tech 26 | Methodology

#### 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 case studies with a 100% online learning system based on repetition, combining a minimum of 8 different elements in each lesson, which represent a real revolution with respect to simply studying and analyzing cases.

Educators 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.





## Methodology | 27 tech

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).

With this methodology we have trained more than 85,000 educators with unprecedented success in all specialties. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

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

In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). 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.

## tech 28 | Methodology

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



#### **Study Material**

All teaching material is produced by the specialist educators who teach the course, specifically for the course, so that the teaching content is really 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.



#### **Educational Techniques and Procedures on Video**

TECH introduces students to the latest techniques, with the latest educational advances, and to the forefront of Education. All this, first-hand, with the maximum rigor, explained and detailed for your assimilation and understanding. And best of all, you can watch them as many times as you want.



#### **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 multimedia content presentation training Exclusive system 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 your 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.







## tech 32 | Certificate

This **Postgraduate Certificate** in **Assessment and Treatment of Voice Disorders** contains the most complete and up-to-date program on the market.

After the student has passed the assessments, they will receive their corresponding **Postgraduate Certificate** issued by **TECH Technological University** via tracked delivery\*.

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

Title: Postgraduate Certificate in Assessment and Treatment of Voice Disorders

Official N° of Hours: 250 h.



<sup>\*</sup>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.

technological university

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