


Postgraduate Certificate

Arithmetic, Algebra, Geometry,
and Measurement in Pre-School
Education. Number Games

A photograph showing two children from an overhead perspective, writing mathematical equations on a whiteboard. The child on the left is wearing a blue and white striped shirt, and the child on the right is wearing a light blue long-sleeved shirt. The whiteboard contains several equations: 7 , $+ 3 = 4$, $2 \times 2 = 4$, $2 \times 3 =$, $3 \times 3 = 9$, $2 - 1 =$, and $2 - 1 =$. The numbers 7, 4, 9, and the equals signs are written in red, while the other numbers and symbols are in blue. To the right of the whiteboard, a wooden abacus with blue and green beads is visible. The background is a light-colored wooden desk.

7
 $+ 3 = 4$
 $2 \times 2 = 4$
 $2 \times 3 =$
 $3 \times 3 = 9$
 $2 - 1 =$
 $2 - 1 =$



Postgraduate Certificate

Arithmetic, Algebra, Geometry,
and Measurement in Pre-School
Education. Number Games

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

Website: www.techtute.com/us/education/postgraduate-certificate/arithmetic-algebra-geometry-measurement-pre-school-education-number-games

Index

01

Introduction

p. 4

02

Objectives

p. 8

03

Course Management

p. 12

04

Structure and Content

p. 18

05

Methodology

p. 26

06

Certificate

p. 34

01

Introduction

Numbers are basic sociocultural expressions that are used daily in various contexts and settings. Establishing innovative teaching strategies and facilitating the student's numerical comprehension is an arduous task if the necessary instruction and tools are not available. For this reason, TECH has designed a program with which the graduate will be able to determine the phases in the learning of the numerical sequence, as well as the requirements for the understanding of the notion of number. All this, through a 100% online learning and with the support of a team of experts in the field, which will turn the student into a professional with a high mastery of Arithmetic, Algebra, Geometry and Measurement in Pre-school Education.



“

You have at your disposal the best program in the current educational market to delve into the development of arithmetic and numeracy skills, through dozens of hours of theoretical and practical content”

Mathematics and its component branches represent a challenge of understanding for the student, and of teaching for the professional. Its understanding must be approached from the first school levels to avoid that famous difficulty that characterizes it. A solid initial base explained through numerical games and advanced methodologies will lay the foundations for a fluid learning process.

Therefore, the teacher specialized in this area needs constant updating and continuous improvement of their skills when transmitting knowledge to their own students. In this context, TECH has created this Postgraduate Certificate, whose objective is to enable students to update their skills in the teaching of numeracy in Pre-school Education. This way, through a 100% online methodology that allows you to manage your study schedules according to your needs and obligations, the student will obtain an efficient learning and will acquire the necessary skills to advance towards an informal and intuitive arithmetic in Pre-school Education.

To do so, they will have 150 hours of the best theoretical and practical content, which they will be able to access at any time and place, only needing a device with an internet connection. In addition, you will have at your disposal a large amount of complementary material in the form of detailed videos, dynamic summaries of each unit, complementary readings, frequently asked questions and much more, which will help you to boost your career and position yourself as an expert in a high-demand sector.

This **Postgraduate Certificate in Arithmetic, Algebra, Geometry, and Measurement in Pre-School Education. Number Games** contains the most complete and up-to-date educational program on the market. The most important features include:

- ♦ The development of practical cases presented by experts in Arithmetic, Algebra, Geometry and Measurement. in Pre-School
- ♦ The graphic, schematic, and practical contents with which they are created, provide practical information on the disciplines that are essential for professional practice
- ♦ Practical exercises where the self-assessment process can be carried out 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



Delve into the stages in the teaching-learning of magnitudes and boost your professional career thanks to this Postgraduate Certificate”

“

Enroll now and delve into the development of pre-linguistic numerical skills in pre-school education”

The program's teaching staff includes professionals from the sector who contribute their work experience to this training 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.

The design of this program focuses on Problem-Based Learning, by means of which the professional must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, the students will be assisted by an innovative interactive video system created by renowned and experienced experts.

An unique opportunity to establish comparison of counting concepts in Piaget's, Gelman's and Gallistel's Theory.

Take advantage of all the tools offered by this Postgraduate Certificate and access them 24 hours a day, establishing your own pace of study.



02

Objectives

In its commitment to promote elite education, TECH has been equipped with the most cutting-edge tools and a teaching staff of experts in the teaching of Arithmetic, Algebra, Geometry and Measurement for the development of this program. The main objective of this Postgraduate Certificate is to ensure that the teacher achieves a successful update of knowledge in strategies to enhance the concept and use of number that, in turn, guarantee the learning of their students in Pre-school Education. Therefore, through a complete theoretical-practical content and in a totally online modality, you will acquire the necessary skills to achieve your professional objectives.



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Reach your professional goals with a university qualification that allows you to distribute the course load according to your personal needs and professional tasks”



General Objective

- ♦ Provide students with theoretical and instrumental knowledge that will allow them to acquire and develop the necessary competences and skills to perform their teaching work
- ♦ Design didactic games for learning mathematics
- ♦ Gamifying the classroom, a new resource for motivation and learning applied to mathematics

“

with the help of a specialized and experienced team of teachers who have expertise in the necessary requirements for the understanding of the notion of number”





Specific Objectives

- ♦ Be able to plan different games and activities
- ♦ Participate with pleasure in different types of games and regulate their behavior and excitement to the action
- ♦ Help students learn to count, to become familiar with numbers, to distinguish cardinal and ordinal numbers
- ♦ Teach students to work with and learn the cardinal numbers in series, through the manipulation of the appropriate material, to know how they are composed of and broken down into lower numbers

03

Course Management

TECH has gathered a team of experts in Arithmetic, Algebra, Geometry and Measurement in Pre-School Education for the design of this Postgraduate Certificate. Therefore, the quality of its contents is based on the pillars of excellence. As a result, students who decide to take this program will have the opportunity to learn from the most qualified professionals in this area. Experts who will offer the graduate the benefit of their real experience, whose main objective is to offer the student a first class education, in accordance with the current educational environment.





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Improve your skills from experimental psychology and reach your professional goals with the best experts in the educational sector”

International Guest Director

Doctor Noah Heller is a leading professional in the field of **Education**, specializing in the teaching of **Mathematics** and **Science**. With a focus on **teaching innovation**, he has dedicated his career to improving **educational practices** in the **K-12 system**. In addition, his main interests include the **professional development** of **teachers** and the creation of **teaching strategies** to improve the understanding of **Mathematics**, in **Primary** and **High School** students, through **innovative didactic approaches**.

Throughout his career, he has held positions of great relevance, for example, as **Faculty Chair** of the **Leadership Institute** at the **Harvard Graduate School of Education**. He has also directed the **“Master Math for America” Teacher Fellowship Program**, where he has overseen the instruction and expansion of a program that has impacted over **700 math and science teachers** in **New York City**, working closely with senior **mathematics and science professionals**.

At the same time, he has collaborated as a researcher in several publications on the **teaching of mathematics** and **new didactics** applied to **primary education**. He has also given conferences and seminars in which he has promoted **pedagogical approaches** that encourage **critical thinking** in students, making **mathematics teaching** a dynamic and accessible process.

Internationally, Dr. Noah Heller has been recognized for his ability to implement innovative strategies in **STEM education**. In fact, his leadership in **“Master Math for America”** has positioned him as a key figure in teacher training, receiving accolades for his ability to connect **academia with classroom practice**. His work has also been instrumental in the creation of one of the most prestigious **professional development programs** in education.



Dr. Heller, Noah

- ♦ Faculty Chair at the Harvard Graduate School of Education, Cambridge, United Kingdom
- ♦ Director of the “Master Math for America” Teacher Fellowship Program
- ♦ Doctor of Philosophy from New York University
- ♦ B.S. in Science, Physics and Mathematics from The Evergreen State College

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Thanks to TECH, you will be able to learn with the best professionals in the world”

Management



Ms. Delgado Pérez, María José

- ♦ TPR and Mathematics teacher at Peñalar College
- ♦ Secondary and High School Teacher
- ♦ Expert in management of educational centers
- ♦ Co-author of technology books with McGraw Hill Publishers
- ♦ Master's Degree in Educational Center Management and Administration
- ♦ Leadership and management in Elementary, Middle School and High School
- ♦ Graduate in teaching with a specialization in English
- ♦ Industrial Engineer

Professors

Ms. Hitos, María

- ♦ Pre-school and Elementary School Education Teacher Specialized in Mathematics
- ♦ Pre-school and Primary Education Teacher
- ♦ Coordinator of the English Department in Pre-school
- ♦ Linguistic Qualification in English for the Community of Madrid

Ms. Iglesias Serranilla, Elena

- ♦ Teacher of Pre-school and Elementary School Education, specialization in Music
- ♦ Elementary School Education First Cycle Coordinator
- ♦ Training in New Learning Methodologies

D. López Pajarón, Juan

- ♦ Secondary and High School Science Teacher at the Montesclaros School of the Educare Group
- ♦ Coordinator and Head of Educational Projects in Secondary and High School.
- ♦ Technician at Tragsa
- ♦ Biologist with experience in the field of environmental conservation
- ♦ Master's Degree in Direction and Management of Educational Centers by the University International of La Rioja

Ms. Soriano de Antonio, Nuria

- ♦ Philologist Specialist in Spanish Language and Literature
- ♦ Master's Degree in High School Education and Vocational Training from the Alfonso X el Sabio University
- ♦ Master's Degree in Spanish for Foreigners
- ♦ Expert in Educational Center Management and Administration
- ♦ Expert in Didactics of Spanish
- ♦ Degree in Hispanic Philology from the Complutense University of Madrid

Ms. Vega, Isabel

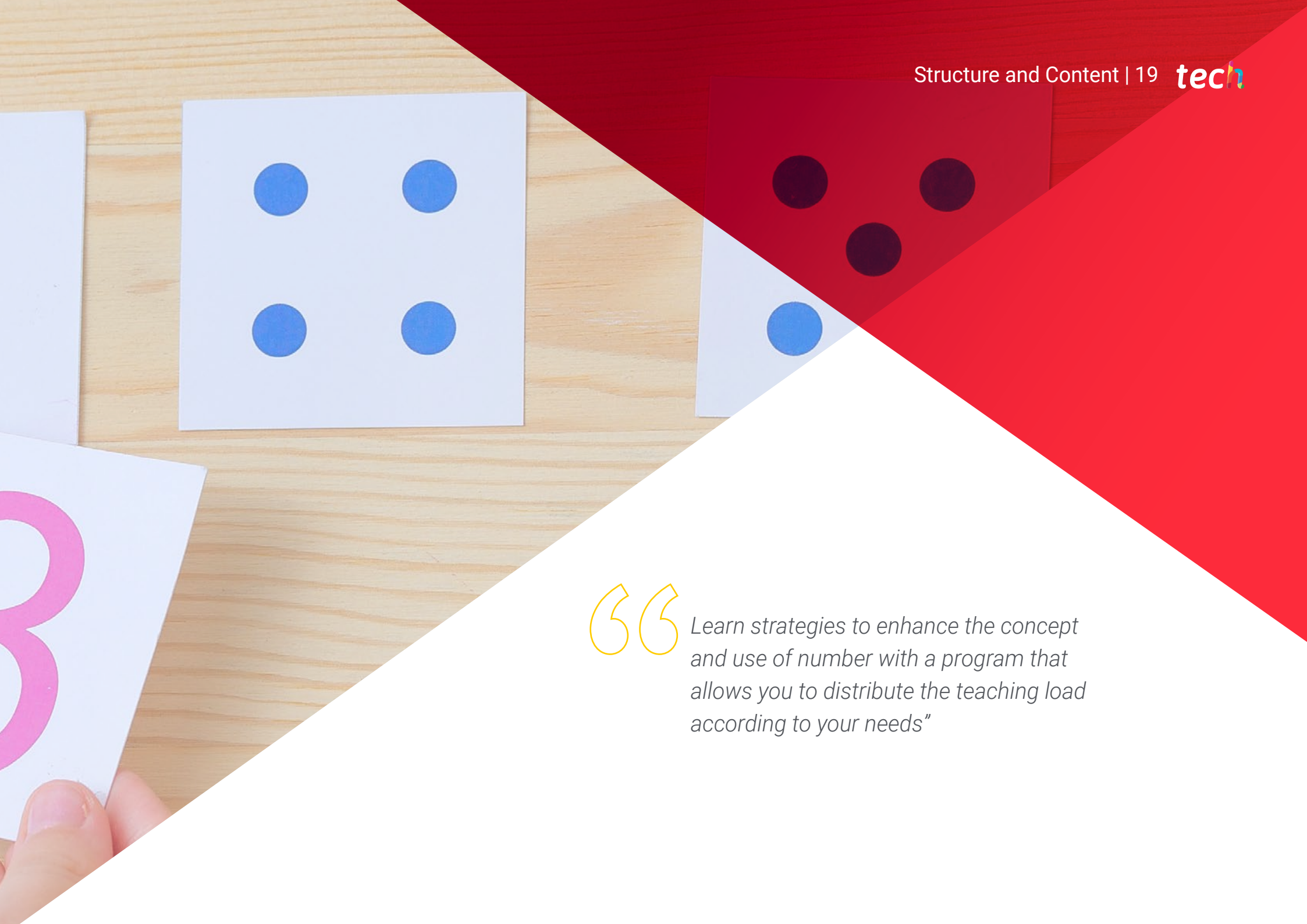
- ♦ Specialized Teacher in mathematics didactics and learning disorders
- ♦ Elementary Education Teacher
- ♦ Elementary School Education Cycle Coordinator
- ♦ Specialized in Special Education and Mathematics teaching Graduate in Teaching

04

Structure and Content

TECH is a pioneer in the field of education for the use of the revolutionary *Relearning* methodology for the development of all its programs. Thanks to the continuous reiteration of the most important concepts throughout the syllabus, the student acquires new knowledge in a natural and progressive way. Therefore, leaving behind the tedious task of memorization, the graduate who completes this program will delve into the numerical spatial arrangement to delve in a more detailed way in the procedures used by the child in counting.





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Learn strategies to enhance the concept and use of number with a program that allows you to distribute the teaching load according to your needs”

Module 1. Arithmetic, Algebra, Geometry and Measurement Games with Numbers

- 1.1. Initiation to Number
 - 1.1.1. Number Concept
 - 1.1.2. Construction of the Number Structure
 - 1.1.3. Numerical Development: Counting
 - 1.1.3.1. Phases in Learning the Numerical Sequence
 - 1.1.3.1.1. Rope or String Level
 - 1.1.3.1.2. Unbreakable Chain Level
 - 1.1.3.1.3. Breakable Chain Level
 - 1.1.3.1.4. Numerable Chain Level
 - 1.1.3.1.5. Bidirectional Chain Level
 - 1.1.4. Counting Principles
 - 1.1.4.1. One-to-one Correspondence Principle
 - 1.1.4.2. Stable Order Principle
 - 1.1.4.3. Cardinality Principle
 - 1.1.4.4. Abstraction Principle
 - 1.1.4.5. Irrelevance of Order Principle
 - 1.1.5. Procedures used by the Child in Counting
 - 1.1.5.1. Term to Term Correspondence
 - 1.1.5.2. Subset to Subset Correspondence
 - 1.1.5.3. Purely Visual Estimation
 - 1.1.5.4. Subitizing
 - 1.1.5.5. Count the Elements of a Collection
 - 1.1.5.6. Recount
 - 1.1.5.7. Discount
 - 1.1.5.8. Overcount
 - 1.1.5.9. Calculation Procedures
 - 1.1.6. Fundamental Cardinal and Ordinal Situations
 - 1.1.7. The Importance of Zero
 - 1.1.8. Strategies to Enhance the Concept and Use of Number



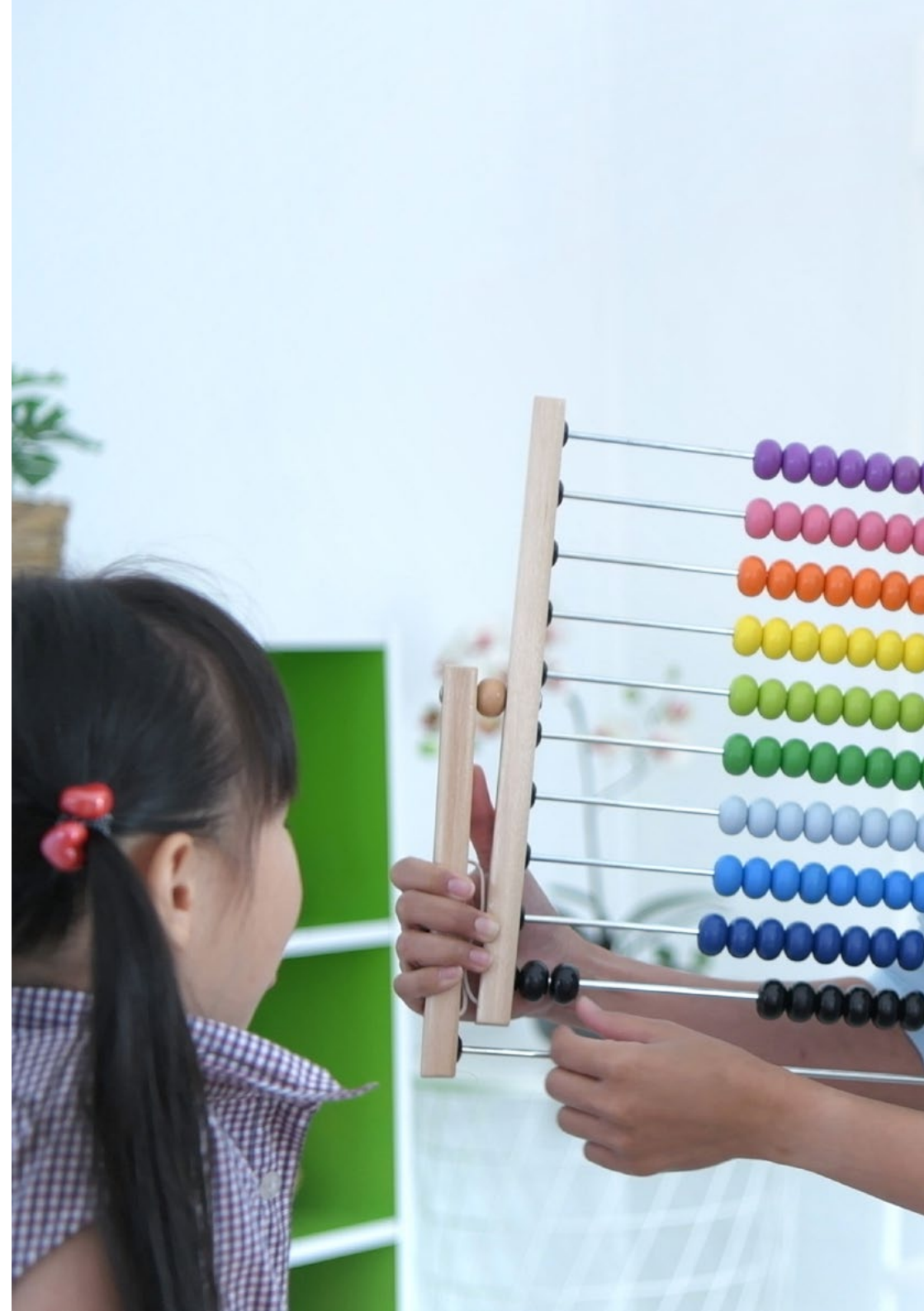


- 1.2. Number Acquisition Process
 - 1.2.1. Introduction
 - 1.2.2. Number Concept
 - 1.2.2.1. Perception of General Quantities
 - 1.2.2.2. Distinguishing and Comparing Quantities of Objects
 - 1.2.2.3. Uniqueness Principle
 - 1.2.2.4. Generalization
 - 1.2.2.5. Summative Action
 - 1.2.2.6. Capture of Named Quantities
 - 1.2.2.6.1. Oral Numeric Series
 - 1.2.2.6.2. Counting Objects
 - 1.2.2.6.3. Cardinal Representation
 - 1.2.2.6.4. Compare Magnitudes
 - 1.2.2.7. Identification of the Name with its Representation
 - 1.2.2.8. Invariance of Named Quantities
 - 1.2.3. From Experimental Psychology
 - 1.2.3.1. Distance Effect
 - 1.2.3.2. Size Effect
 - 1.2.3.3. Numerical Spatial Arrangement
 - 1.2.4. From Developmental Psychology
 - 1.2.4.1. Behavioral, Cognitive and Constructivist Theory
 - 1.2.4.1.1. Exercise Law
 - 1.2.4.1.2. Law of Effect
 - 1.2.5. Theories on the Process of Number Acquisition
 - 1.2.6. Piaget
 - 1.2.6.1. Stages
 - 1.2.6.2. Requirements for the Understanding of the Notion of Number

- 1.2.7. Dienes
 - 1.2.7.1. Principles
 - 1.2.7.1.1. Dynamic Principle
 - 1.2.7.1.2. Constructive Principle
 - 1.2.7.1.3. Economic Variability Principle
 - 1.2.7.1.4. Constructive Variability Principle
 - 1.2.7.2. Stages
 - 1.2.7.2.1. Free Play
 - 1.2.7.2.2. Game with Rules
 - 1.2.7.2.3. Isomorphic Games
 - 1.2.7.2.4. Representation
 - 1.2.7.2.5. Description
 - 1.2.7.2.6. Deduction
 - 1.2.8. Mialaret
 - 1.2.8.1. Stages
 - 1.2.8.1.1. Action Itself
 - 1.2.8.1.2. Action Accompanied by Language
 - 1.2.8.1.3. Conduct of the Narrative
 - 1.2.8.1.4. Application of the Story to real Situations
 - 1.2.8.1.5. Graphical Expression of the Actions already Reported and Represented
 - 1.2.8.1.6. Symbolic Translation of the Studied Problem
 - 1.2.9. Information Processing
 - 1.2.9.1. Numerical Apprehension Model
 - 1.2.9.2. Pre-linguistic Numerical Skills
 - 1.2.10. Counting Principles (Gelman and Gallistel)
 - 1.2.10.1. Biunivocal Correspondence Principle
 - 1.2.10.2. Stable Order Principle
 - 1.2.10.3. Cardinality Principle
 - 1.2.10.4. Abstraction Principle
 - 1.2.10.5. Inconsequence of Order Principle
 - 1.2.11. Comparison of Counting Principles between Piaget's, Gelman's and Gallistel's Theory
- 1.3. Informal Arithmetic I
 - 1.3.1. Introduction
 - 1.3.2. Towards an Informal and Intuitive Arithmetic in Pre-school Education
 - 1.3.2.1. Recognize Quantities
 - 1.3.2.2. Relate Quantities
 - 1.3.2.3. Operate Quantities
 - 1.3.3. Objectives
 - 1.3.4. Early Arithmetic Skills
 - 1.3.4.1. Preservation of Inequality
 - 1.3.5. Arithmetic Skills and Chants
 - 1.3.5.1. Preliminary Considerations
 - 1.3.5.1.1. Socio-Cognitive Conflict
 - 1.3.5.1.2. Role of the Language
 - 1.3.5.1.3. Creation of Contexts
 - 1.3.5.2. Procedures and Mastery of the Chants
 - 1.4. Informal Arithmetic II
 - 1.4.1. Memorization of Numerical Facts
 - 1.4.1.1. Activities to Work on Memorization
 - 1.4.1.2. Domino
 - 1.4.1.3. Hopscotch
 - 1.4.2. Didactic Situations for the Introduction of Addition
 - 1.4.2.1. Dialed Number Game
 - 1.4.2.2. Race to 10
 - 1.4.2.3. Christmas Greeting
 - 1.5. Basic Arithmetic Operations
 - 1.5.1. Introduction
 - 1.5.2. Additive Structure
 - 1.5.2.1. Phases of Mialaret
 - 1.5.2.1.1. Approach Through Manipulation
 - 1.5.2.1.2. Action Accompanied by Language
 - 1.5.2.1.3. Mental Work Supported by Verbalization
 - 1.5.2.1.4. Purely Mental Work

- 1.5.2.2. Strategies to Add
- 1.5.2.3. Initiation to Subtraction
- 1.5.2.4. Addition and Subtraction
 - 1.5.2.4.1. Direct and Object Modeling
 - 1.5.2.4.2. Counting Sequences
 - 1.5.2.4.3. Recalled Numeric Data
 - 1.5.2.4.4. Strategies to Add
 - 1.5.2.4.5. Subtraction Strategies
- 1.5.3. Multiplication and Division
- 1.5.4. Arithmetic Problem Solving
 - 1.5.4.1. Addition and Subtraction
 - 1.5.4.2. Multiplications and Divisions
- 1.6. Space and Geometry in Pre-school Education
 - 1.6.1. Introduction
 - 1.6.2. Objectives Proposed by the NCTM
 - 1.6.3. Psychopedagogical Considerations
 - 1.6.4. Recommendations for Teaching Geometry
 - 1.6.5. Piaget and his Contribution to Geometry
 - 1.6.6. Van Hiele Model
 - 1.6.6.1. Levels
 - 1.6.6.1.1. Visualization or Recognition
 - 1.6.6.1.2. Analysis
 - 1.6.6.1.3. Sorting and Classification
 - 1.6.6.1.4. Rigor
 - 1.6.6.2. Learning Phases
 - 1.6.6.2.1. Phase 1: Consultancy
 - 1.6.6.2.2. Phase 2: Directed Guidance
 - Psychologist's Assessment Phase 3: Explication
 - 1.6.6.2.4. Phase 4: Guidance
 - 1.6.6.2.5. Phase 5: Integration
- 1.6.7. Geometry Types
 - 1.6.7.1. Topological
 - 1.6.7.2. Projective
 - 1.6.7.3. Metrics
- 1.6.8. Visualization and Reasoning
 - 1.6.8.1. Spatial Orientation
 - 1.6.8.2. Spatial Structuring
 - 1.6.8.3. Gálvez y Brousseau
 - 1.6.8.3.1. Microspace
 - 1.6.8.3.2. Mesospace
 - 1.6.8.3.3. Macrospace
- 1.7. Magnitudes and their Measurement
 - 1.7.1. Introduction
 - 1.7.2. Construction of the Notion of Magnitude in the Child
 - 1.7.2.1. Piagetian Phases in the Construction of Magnitudes
 - 1.7.2.1.1. Consideration and Perception of a Magnitude
 - 1.7.2.1.2. Conservation of Magnitude
 - 1.7.2.1.3. Ordering with Respect to Magnitude
 - 1.7.2.1.4. Correspondence of Numbers to Quantities of Magnitude
 - 1.7.2.2. Stages in the Construction of the Measure
 - 1.7.2.2.1. Direct Perceptual Comparison
 - 1.7.2.2.2. Displacement of Objects
 - 1.7.2.2.3. Operability of the Transitive Property
 - 1.7.2.3. Stages in the Teaching-Learning of Magnitudes
 - 1.7.2.3.1. Sensory Stimulation
 - 1.7.2.3.2. Direct Comparison
 - 1.7.2.3.3. Indirect Comparison
 - 1.7.2.3.4. Choice of Unit
 - 1.7.2.3.5. Irregular Measurement System
 - 1.7.2.3.6. Regular Measurement System

- 1.7.3. Measuring Magnitudes
- 1.7.4. Length Measurement
- 1.7.5. Length Measurement
- 1.7.6. Measurement of Capacity and Volume
- 1.7.7. Measurement of Time
- 1.7.8. Phases of the Different Magnitudes
 - 1.7.8.1. Preparation Phase
 - 1.7.8.2. Measurement Practice Phase
 - 1.7.8.3. Consolidation Phase of Techniques and Concepts
- 1.8. Play in Pre-school Education
 - 1.8.1. Introduction
 - 1.8.2. Objectives
 - 1.8.3. Playing Features
 - 1.8.4. Evolution of the Game
 - 1.8.4.1. Types of Games
 - 1.8.4.1.1. Functional Game
 - 1.8.4.1.2. Imitation or Symbolic Play
 - 1.8.4.1.3. Game with Rules
 - 1.8.4.1.4. Construction Game
 - 1.8.5. Chance and Strategy
 - 1.8.6. Competition in the Games
 - 1.8.7. Didactic Considerations on the Game
- 1.9. Didactic Resources of the Game
 - 1.9.1. Games and Logical Thinking
 - 1.9.1.1. Three in a Row
 - 1.9.1.2. Quarto
 - 1.9.1.3. Portrait Games
 - 1.9.2. Quantitative Games
 - 1.9.2.1. Number to Compare
 - 1.9.2.1.1. Let's Go Home!!
 - 1.9.2.2. Number to Calculate
 - 1.9.2.2.1. Couples
 - 1.9.2.2.2. It's Over!!
 - 1.9.2.2.3. Cat and Mouse





- 1.9.3. Games and the Structure of Space
 - 1.9.3.1. Puzzles
 - 1.9.3.1.1. Two-Color Paintings
 - 1.9.3.1.2. The Hex
- 1.10. Games in Different Spaces
 - 1.10.1. Introduction
 - 1.10.2. Games in the Classroom
 - 1.10.2.1. The Butterfly Game
 - 1.10.2.2. The Partitioning Game
 - 1.10.2.3. Image Trains
 - 1.10.2.4. The Newspaper
 - 1.10.2.5. Flat Figures
 - 1.10.2.6. The Containers
 - 1.10.3. Games in Psychomotor Skills
 - 1.10.3.1. Working with Sizes
 - 1.10.3.2. Classify
 - 1.10.3.3. We Play with the Hoops
 - 1.10.4. Outdoor Games
 - 1.10.5. Mathematical Games with ICT
 - 1.10.5.1. Playing with the Turtle's Mind
 - 1.10.5.2. Geometric Figures
 - 1.10.5.3. For 3-Year-Old Students
 - 1.10.5.4. Variety of Activities
 - 1.10.5.5. Didactic Unit



Get into mathematical games through the use of ICT, thanks to the exclusive multimedia content provided by TECH”

05

Methodology

This training program offers 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.





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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 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.

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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. 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.



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.

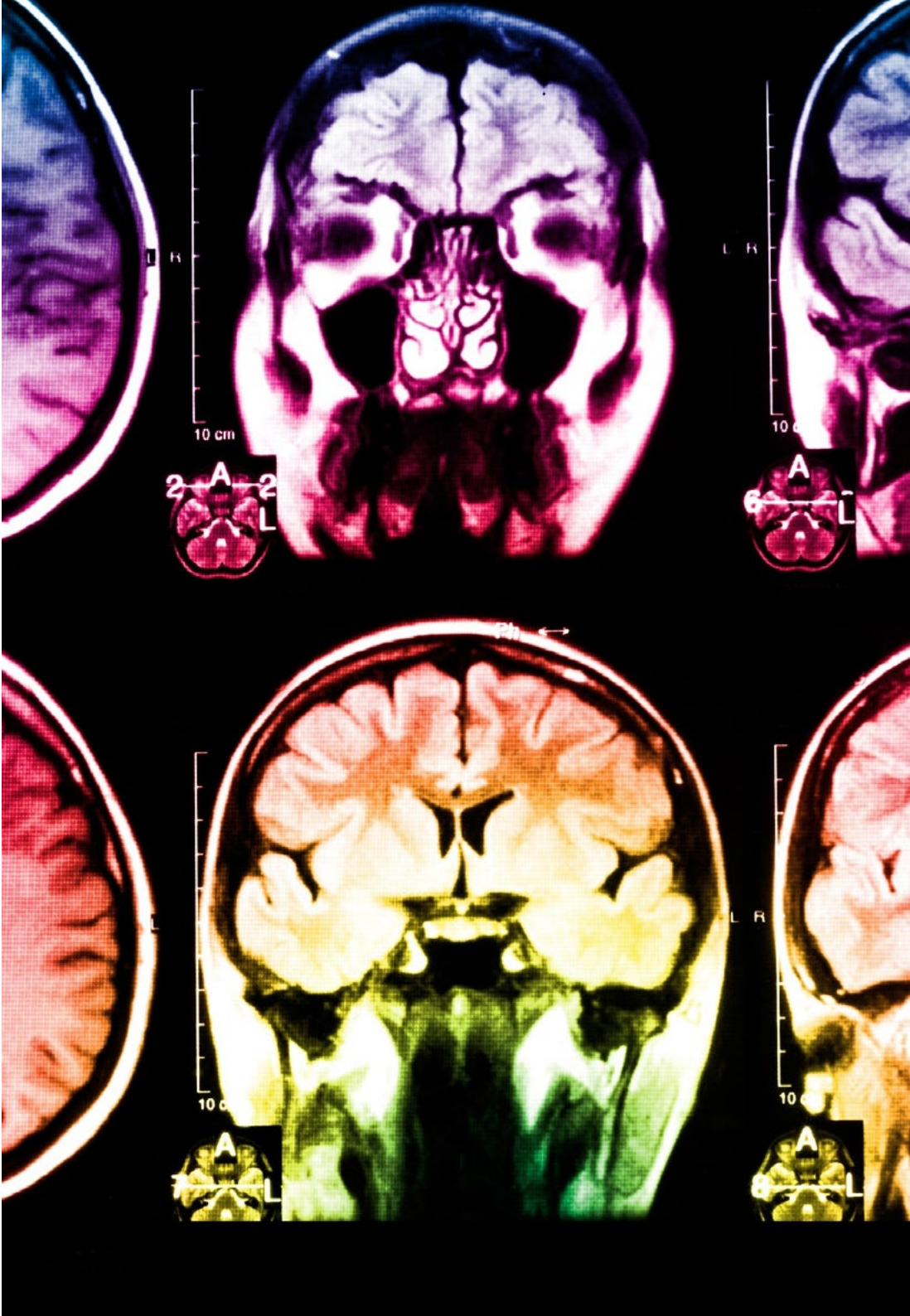
At the forefront of world teaching, the Relearning method has managed to improve the overall satisfaction levels of professionals who complete their studies, with respect to the quality indicators of the best online university (Columbia University).

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.



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

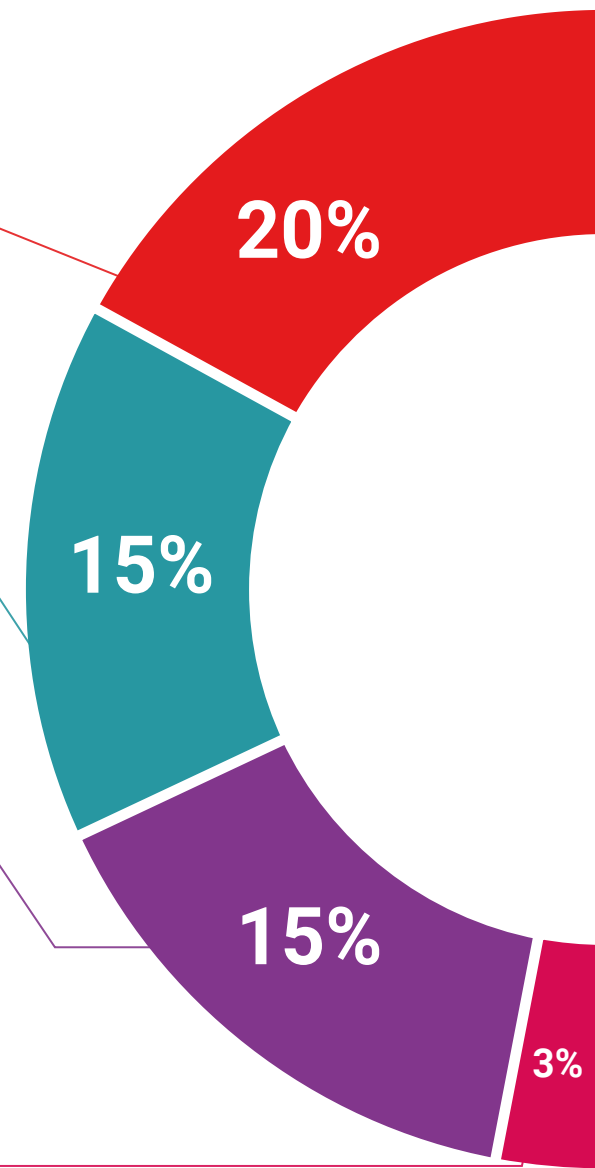
The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

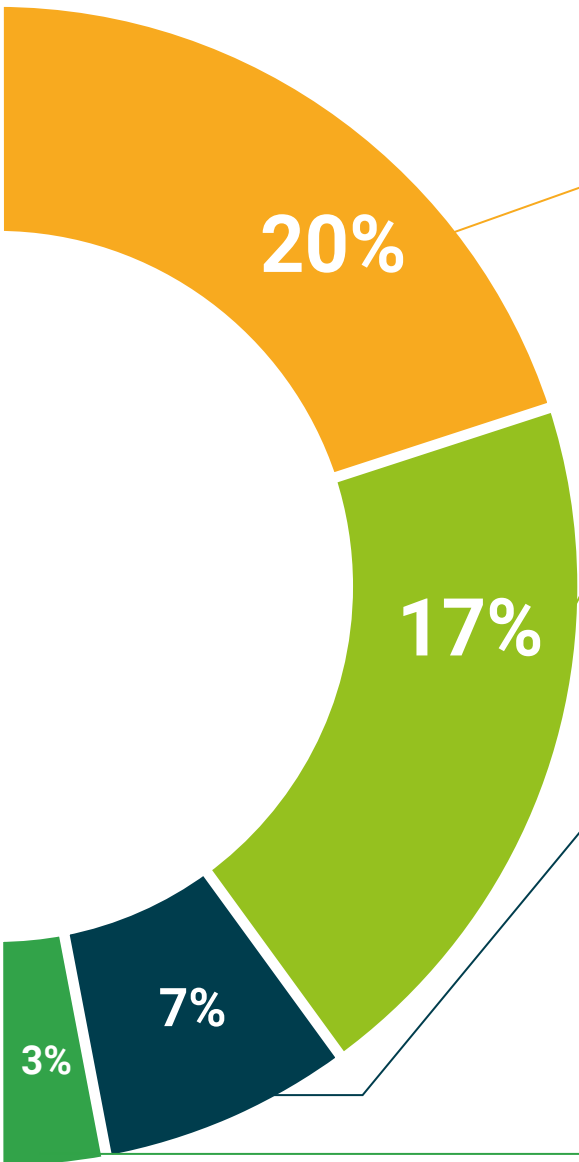
This exclusive multimedia content presentation training Exclusive system was awarded by Microsoft as a "European Success Story".



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.



06

Certificate

Postgraduate Certificate in Arithmetic, Algebra, Geometry, and Measurement in Pre-School Education. Number Games guarantees, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.



“

Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork”

This program will allow you to obtain your **Postgraduate Certificate in Arithmetic, Algebra, Geometry, and Measurement in Pre-School Education. Number Games** by **TECH Global University**, the world's largest online university.

TECH Global University is an official European University publicly recognized by the Government of Andorra ([official bulletin](#)). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in Arithmetic, Algebra, Geometry, and Measurement in Pre-School Education. Number Games**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**



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




Postgraduate Certificate

Arithmetic, Algebra, Geometry,
and Measurement in Pre-School
Education Number Games

- » Modality: online
- » Duration: 6 weeks
- » Certificate: TECH Global University
- » Credits: 6 ECTS
- » Schedule: at your own pace
- » Exams: online

Postgraduate Certificate

Arithmetic, Algebra, Geometry,
and Measurement in Pre-School
Education. Number Games

A photograph of three children sitting around a whiteboard in a classroom. They are using markers to write mathematical equations. The whiteboard has several equations written on it, some in blue and some in red. To the right of the whiteboard, there is a wooden abacus with blue and green beads. The children are wearing blue and light blue clothing. The background is a wooden desk.
$$7$$
$$+ 3 = 4$$
$$2 \times 2 = 4$$
$$2 \times 3 =$$
$$3 \times 3 = 9$$
$$2 - 1 =$$
$$3 - 1 =$$