



COURSE TITLE:

Primary Mathematics for Understanding, Problem Solving and Inclusion

DATES: Wednesday 21 April, Thursday 22 April, Friday 23 April 2027

TRAINER/S: Mr Robert Atanasio, Ms Maria Debrincat and Ms Kim Dimech

TARGET AUDIENCE: Primary Educators

**VENUE: Secretariat for Catholic Education, SfCE Main Hall,
36 Triq Idmejda Balzan BZN 1520 Malta**

COURSE FEE: €240

COURSE DESCRIPTION:

Primary Mathematics for Understanding, Problem Solving and Inclusion is a three-day professional learning course designed to support educators in developing high-quality, inclusive mathematics teaching practices across the primary years. Grounded in the principles of the Maths Mastery approach and the CPA framework, the course explores how learners can build deep mathematical understanding, confidence and success through meaningful learning experiences.

Participants will examine the role of fluency in developing secure number sense, explore how visual representations such as bar models can strengthen problem-solving and reasoning, and gain a deeper understanding of the challenges faced by learners with mathematics difficulties, including dyscalculia and maths anxiety.

Throughout the course, educators will engage with practical classroom strategies, hands-on activities and evidence-informed approaches that can be adapted across different year groups. The sessions aim to empower educators create inclusive learning environments where all children can develop mathematical understanding, resilience and a positive disposition towards mathematics.



LEARNING OUTCOMES:

By the end of this course, participants will be able to:

- Develop a deeper understanding of the key principles underpinning effective and inclusive mathematics teaching within a Maths Mastery framework.
- Explain the different components of mathematical fluency, including accuracy, efficiency, flexibility and appropriate speed and identify ways to nurture these in the classroom.
- Use a range of strategies and representations to support the development of number sense and conceptual understanding across the primary years.
- Explore and apply bar modelling as a visual approach to support mathematical problem-solving, reasoning and communication.
- Identify opportunities to use bar models across a variety of mathematical topics, including addition, subtraction, multiplication division and fractions.
- Recognise the characteristics and indicators of mathematics learning difficulties, including dyscalculia, and understand their impact on mathematical learning and achievement.
- Develop an awareness of the prevalence and co-occurrence of dyscalculia, mathematics learning difficulties and maths anxiety, and their influence on learners' confidence, engagement and attainment.
- Explore practical and evidence-informed strategies, including the use of games and targeted interventions, to support learners experiencing difficulties in mathematics.
- Reflect on and adapt teaching practices to create more inclusive mathematics learning environments that meet the diverse needs of learners and promote success for all.



COURSE PROGRAMME:

DAY 1: Making Numbers Make Sense: Building Fluency for Understanding

This session will support educators across all primary year groups in developing a deeper understanding of what mathematical fluency truly means and how it contributes to successful learning in mathematics. Moving beyond the misconception that fluency is simply speed, participants will explore the interconnected elements of fluency: accuracy, efficiency, flexibility and appropriate speed. Through practical examples and collaborative discussion, educators will consider how these aspects can be nurtured progressively throughout the primary years.

The session will provide opportunities to explore classroom approaches that strengthen number sense and support children in making meaningful connections between mathematical ideas. Participants will gain insight into the progression of fluency activities across the primary years and how these activities support and deepen conceptual understanding.

Attention will also be given to how fluency can be reinforced beyond the classroom through purposeful practice and rich mathematical experiences. Educators will leave with a clearer understanding of fluency and a range of practical ideas to help learners become confident and capable mathematicians.

DAY 2: From Words to Bars: Making Problems Visible

This session will introduce educators, particularly those working from Year 2 onwards, to the use of bar modelling as a powerful visual strategy for supporting mathematical understanding and problem-solving. Participants will explore how bar models can help children make sense of mathematical situations, represent relationships visually and develop greater confidence when solving word problems.

A variety of bar model structures will be examined, allowing educators to understand how the approach can be adapted and used progressively across different year groups. Through hands-on activities and worked examples, participants will investigate how bar models can support learning in topics such as addition, subtraction, multiplication, division and fractions, while also strengthening reasoning and mathematical communication.

The session will highlight how visual representations can bridge understanding between concrete experiences and abstract concepts. Educators will have opportunities to apply the strategy themselves and reflect on its classroom implementation, leaving with practical ideas and resources that can be readily adapted to support learners in developing problem-solving skills.



DAY 3: Maths Learning Difficulties, Dyscalculia and Anxiety

This session aims to develop educators' awareness and understanding of mathematics learning difficulties, with a particular focus on dyscalculia and the impact of maths anxiety on learning.

Participants will explore what dyscalculia is, how it differs from general difficulties in mathematics, and the ways in which these challenges may present themselves in the classroom. Attention will also be given to the prevalence of dyscalculia and its frequent co-occurrence with maths anxiety, helping educators better understand the barriers some learners experience.

The session will examine key indicators that may suggest a learner is struggling with mathematical understanding and will outline important considerations in the assessment and identification process. Participants will explore evidence-informed strategies that support learners in developing mathematical understanding and confidence, while reducing anxiety and frustration. Particular emphasis will be placed on the use of games and engaging learning experiences as effective tools for developing number sense, participation and enjoyment. Educators will leave with practical approaches to create more inclusive mathematics classrooms where all learners can thrive.

REGISTRATION:

For provisional bookings please register [HERE](#).



