

## Mathematics

21-23 May 2025

IB MYP Category 2 with Dimitra Milioni

### About this workshop

This workshop is provided by IBICUS Ltd, a licensed and fully authorised organiser of professional development programmes for the IB community.

Following the IB Guidelines for this workshop Category, we aim to encourage and enable participants to:

- explore and align your practices with the IB standards and practices
- refine and continue to develop a collaborative and collegial approach to the structures and principles of mathematics aims and objectives
- deepen your understanding and capabilities for delivering your content through concepts, context, and approaches to learning skills
- evaluate, strengthen, and design new tasks that will support the implementation of mathematics expectations
- reflect upon the relevance, innovation, and rigour of the student-centred environments that you have created
- discover and create opportunities to make your content more accessible to a broader range of students.

### Pre-workshop information and preparation

It is essential that you come ready to share your practice, ideas and resources.

Before the workshop, please do the following:

- Complete the form **Pre-workshop Questionnaire** once you receive it by mail.
- Watch the following video that provides an overview of what is an IB Education.  
<https://player.vimeo.com/video/92725628>

### Materials

Please ensure you have your code to My IB available, possible examples of existing unit planners in your school and any work you would like to share with the rest of the participants.

## DAY 1

UK Time	Session	Objectives
08:30 – 08:55	SET UP	Meet and greet and ensure everyone has connectivity and access to materials and apps
08:55 – 09:00	BREAK	
09:00 – 10:00	1.1 IB Standards and practices	<ul style="list-style-type: none"> <li>• Discuss perspectives and challenges on education in our ever-changing world that impact MYP delivery.</li> <li>• Examine elements of the IB programme standards and practices as a guide for decisions regarding delivery of the programme.</li> <li>• Identify the impact on current practices</li> </ul>
10:00 – 10:15	BREAK	

10:15 – 11:45	1.2 Coherent curriculum - concepts	<ul style="list-style-type: none"> <li>• Consider the mathematics framework in depth</li> <li>• Explore how the related concepts connect topics of the mathematics framework to the key concept</li> <li>• Create a conceptual understanding inspired by the respective branches of the mathematics framework</li> </ul>
11:45 – 12:00	BREAK	
12:00 – 13:30	1.3 Coherent curriculum - contexts	<ul style="list-style-type: none"> <li>• Examine the global contexts and what these may communicate about international mindedness</li> <li>• Demonstrate understanding of concepts and context as a statement of inquiry</li> <li>• Synthesize the understanding of concepts/contexts and how they may ground interdisciplinary teaching and learning</li> </ul>
Optional self-study		<ul style="list-style-type: none"> <li>• <i>Option 1: The Mathematics framework</i></li> <li>• <i>Option 2: Interdisciplinary!</i></li> <li>• <i>Option 3: Command terms and reasoning</i></li> </ul>

## DAY 2

UK Time	Session	Objectives
09:00 – 10:30	2.1 Summative assessment tasks	<ul style="list-style-type: none"> <li>• Consolidate understanding around the design of assessment tasks that are authentic in nature</li> <li>• Design an authentic summative assessment task aligned with the appropriate objectives/strands.</li> <li>• Justify the relationship between the summative assessment task and the statement of inquiry.</li> <li>• Formulate task-specific clarifications</li> </ul>
10:30 – 10:45	BREAK	
10:45 – 11:45	2.2 Approaches to learning skills	<ul style="list-style-type: none"> <li>• Classify approaches to learning skills (ATL) with reference to the mathematics objectives and their strands.</li> <li>• Select approaches to learning skills that support the continuum in Mathematics.</li> <li>• Design approaches to learning experiences to support achievement on a summative task.</li> </ul>
11:45 – 12:00	BREAK	
12:00 – 13:30	2.3 Life-long learners	<ul style="list-style-type: none"> <li>• Reflect on opportunities for inquiry in mathematics</li> <li>• Contrast the difference between inquiry and action section questions.</li> <li>• Create inquiry questions for a unit that will focus on reasoning.</li> <li>• Design meaningful learning engagements focused on inquiry and reflection practices</li> </ul>
Optional self-study		<ul style="list-style-type: none"> <li>• <i>Option 1: Effective use of technology in mathematics</i></li> <li>• <i>Option 2: Inquiry in the classroom</i></li> <li>• <i>Option 3: Making “Level descriptors” task specific</i></li> </ul>

## DAY 3

UK Time	Session	Objectives
09:00 – 10:30	3.1 Formative assessment - Differentiation	<ul style="list-style-type: none"><li>• Reflect on formative assessment in Mathematics.</li><li>• Develop formative assessment tasks that support achievement on a summative assessment task</li><li>• Inquire into adjustment to instruction in mathematics teaching</li><li>• Design learning experiences to support a range of learning styles and needs.</li></ul>
10:30 – 10:45	BREAK	
10:45 – 11:45	3.2 Standardization - recording/reporting	<ul style="list-style-type: none"><li>• Inquire into how achievement levels are used.</li><li>• Investigate the process of standardization using student work.</li><li>• Draw conclusions about standardization practices.</li><li>• Discuss successful strategies for recording and reporting ongoing student progress.</li></ul>
11:45 – 12:00	BREAK	
12:00 – 13:30	3.3 e-Assessment	<ul style="list-style-type: none"><li>• Investigate the nature and implications of eAssessment</li><li>• Consider implications of MYP mathematics on-screen examinations for teaching and learning across the years.</li><li>• Resources and final reflection</li></ul>
Optional self-study		<ul style="list-style-type: none"><li>• <i>Option 1: Adjustment to instruction</i></li><li>• <i>Option 2: Engage with an e-Assessment sample</i></li><li>• <i>Option 3: Where are we now and where are we headed?</i></li></ul>