

InThinking Maths Standard Workshop

For Teachers New to the IB Diploma

Barcelona, Spain

Friday 15th - Sunday 17th October 2010

Workshop Leader: Tim Garry

Aim

The primary aim of this workshop is to examine all the essential elements of the IB Mathematics Standard Level course while also taking time to explore and discuss effective teaching practices and materials. Thus the content and activities of the workshop set out to provide teachers new to the IB Diploma Programme the knowledge and insight to teach the two-year Mathematics SL course confidently and proficiently.

Objectives

- To consider different approaches of organizing the teaching sequence of course topics.
- To encourage thoughtful discussion among participants and the sharing of teaching ideas.
- To provide information and guidance on working with students on portfolio tasks (internal assessment).
- To discuss ways in which IB Mathematics teachers can address Theory of Knowledge and internationalism.
- To explore appropriate use of calculators and technology in teaching and examinations.
- To discuss effective teaching approaches for different topics in the syllabus.
- To examine the relationship between the HL and SL course – content, mixed classes, etc.
- To look at a range of teaching support materials and resources.
- To provide information and guidance for adequately preparing students for external examinations.

Agenda

Session 1

Introductions. Overview of the IB Diploma Programme and Mathematics SL. Different schemes and plans for organizing and teaching the two-year course. A couple of 'nice' problems for solving and discussing. The IB's Online Curriculum Centre (OCC).

Session 2

Overview of important information and issues concerning external and internal assessment. Preparation for Paper 1 (no calculator) and Paper 2 (calculator required) exams. Using past exam papers and markschemes. Writing a good mock exam.

Session 3

Preparing students for portfolio tasks – skills, approach, materials, etc. Organizing and managing the internal assessment (portfolios). Technology use on portfolios. Writing teacher notes (model solution) for a portfolio task.

Session 4

The set of portfolio tasks produced by the IB. Marking a portfolio task – part 1. Writing a portfolio task.

Session 5

Appropriate use of calculators. Other technological tools to enhance teaching and learning. Teaching materials and resources – part 1.

Session 6

Marking a portfolio task – part 2. The internal assessment moderation process.

Session 7

In-class assessments - GDC allowed / not allowed. Type and style of questions on a Paper 1 exam. Marking a Paper 1 exam. Teaching ideas.

Session 8

Theory of Knowledge and internationalism. Subject reports, predicted grades, paper editing.

['optional' Session 8B] (30 min session after end of last session on Saturday)

Overview of some practical details of the TI-84 Plus calculator – transferring files between calculator and computer, preparing student calculator for use on IB exams, etc.

Session 9

Type and style of questions on a Paper 2 exam. Marking a Paper 2 exam. Teaching ideas. Student working/ documentation for a calculator solution.

Session 10

Teaching materials and resources – part 2. Vade mecum, forms, deadlines, online curriculum centre (again).

Participants need to bring:

Subject Guide

Graphing calculator

The set of IB Portfolio tasks for 2011 & 2012

Teaching ideas to share