

# InThinking Maths Higher Workshop

For Teachers New to the IB Diploma

Barcelona, Spain

Friday 15th - Sunday 17th October 2010

Workshop Leader: Ibrahim Wazir

## Agenda

### **9:00 – 10:30 Session I Introductory session**

General introduction to IB Mathematics.

Philosophy of the different levels.

Presumed knowledge.

Placement of students.

Aims and performance criteria.

The new regulations and how it affects our teaching, if any.

Planning the workshop in terms of participants' contribution.

### **11:00 – 12:30 Session II Mathematics HL Syllabus - core**

Teaching the core syllabus, some highlights of topics plus a few problems.

Possible teaching plans. Bring yours too.

Teaching SL and HL together or separately

Specimen questions discussion. Present published questions and newly created ones.

Starting your first mock IB paper.

### **13:30 – 15:00 Session III Internal Assessment - I**

A discussion of Internal assessment criteria.

Types of assignments and examples (Type I)-bring yours

Writing a portfolio assignment – starting the activity: Bring an idea of a task and we will develop it together. If you do not have an idea of one task, we will provide you with one.

Examples of students work- a look at real students' work-If you have any you want to share please send them beforehand, or bring them with you if that is not possible.

The session will be continued the next day.

### **15:15 – 16:45 Session IV Mathematics HL Syllabus - options**

Dealing with the options. Tips of how to prepare our students for each of the four present options. I will consider two options in detail: Statistics and Series and DE's unless there is a request for others –We may split into groups for that.

Specimen questions

### **9:00 – 10:30 Session V Assessment**

External and Internal Assessment.

Composition of papers.

Philosophy used in paper setting.

Marking and moderation process of a paper.

Grade Award.

Samples of student papers.

### **11:00 – 12:30 Session VI Idea-sharing session**

Uses of GDC in teaching and assessing HL mathematics  
The role of calculators in teaching.

Activities using a graphic display calculator- Samples of questions that need a GDC

Resources available for the teachers

Discussing your favorite Computer Algebra Systems(CAS). (bring your laptop). I will share Derive, Autograph, and a few others.

Textbooks and resource materials.

Sharing ideas to enhance teaching.

Presentation of successful lessons by participants. This session may spill over to other sessions if you are willing to share! We will adjust the agenda accordingly.

### **13:30 – 15:00 Session VII Internal Assessment - II**

Types of assignments and examples. (Type II)

Writing a portfolio assignment.

Examples of students work.

Moderation of a portfolio.

Tasks left over from previous sessions

### **15:15 – 16:45 Session VIII External Assessment**

Comments on the exams May 2008.

Looking at an example of students' work. Marking a few questions.

Discussion of Chief Examiners' report.

Discussing some of your Paper 1 type of questions.

Discussing some of your Paper 2 type of questions.

Producing papers and Markschemes for the papers.

### **8:30 – 10:00 Session IX Extended Essays in Mathematics and Sharing ideas and resources**

Guidelines. Successful practices.

Choice of a topic and the teacher's role.

Assessment. Suggested topics and sources of projects

Textbooks and resource materials.

Sharing ideas to enhance teaching. Continued – I hope!

### **10:30 – 12:00 Session X Open session and Evaluation**

Issues left over from previous sessions.

Opportunity to raise specific issues or concerns.

Evaluation of the workshop.

Please bring the following with you to the session

1. A GDC – Laptop if you want to share your CAS.
2. HL Guide 2008
3. TSM-HL
4. T-Notes
5. New specimen questions.
6. New IA tasks
7. May 2009 Exams (must!) and mark schemes + 2010 exams & MS.
8. Any lesson plans, portfolios, resources you believe will make the workshop richer.