



Quality Education Centre

Bridging the IB learning gap with **The Edge**

Indrani Banerjee talks about the recent IB Maths changes and how best to prep for the exams



The recent changes to the IB Diploma programme mathematics curriculum have sent students, parents and schools into a flurry of uncertainty. Are the subjects going to be drastically different? Will the new syllabus be easier or more difficult than the current modules? How best to adjust to these changes for both teaching and learning?

Fret not, says The Edge Learning Center tutor Indrani Banerjee: "The brain is a muscle and the one thing that you can really do to prep for uncertain syllabi is to pre-learn."

But what exactly does that entail? Well, The Edge makes sure that their Academic Tutoring Department will not only lead students towards subject mastery but to take them further, ahead of their in-school instruction, which the center calls "pre-learning."

This means that students who enrol at The Edge's summer IB courses this year will get an intensive introduction into the new syllabus changes for the IB Maths curriculum.

The biggest shift in the framework of how Maths will be taught in the diploma programme, says Indrani, is that the current four courses that students will get to choose from – Mathematical Studies SL (Standard Level), Mathematics SL, Mathematics HL (Higher Level), and Further Mathematics HL – will be streamlined into two mathematics subjects/routes that will each be offered at standard level and higher level.

The Mathematics Analysis and approaches course, or AA, is designed for students "to explore real and abstract applications, sometimes with technology, and

will enjoy the thrill of mathematical problem solving and generalization," according to the IB website.

Meanwhile, the Mathematics: Applications and interpretation, or the AI course, is for "those who enjoy mathematics best when seen in a practical context." Indrani believes that these changes makes higher maths much more approachable to students. Whereas previously they would have written off higher maths as an unattainable subject that would be too difficult, she believes that, with the new curriculum, students can be challenged in a more positive way.

"Students can attempt HL and if they don't like it, they can switch down to SL and it's not going to be the end of the world for their diploma," she said. The pressure is then taken off students to make a decision even before they know what the subjects entail. That's where The Edge tutors step in.

Indrani says: "Our priority has been to, firstly, provide the kids with a solid background of what they need to know that is common to both curriculums. I want the kids to go into year 12 and be able say say, 'Hey I wanna do this course because I actually know what the difference is between the two.'"

via their learning guide the Toolkit, which urges schools to incorporate more tech into their Maths teaching – The Edge is also doing the same for their students.

"We've been looking up different projects that we can set students up for modelling, and looking to see how we can integrate calculator work into our courses," Indrani says.

The Edge is offering an intensive 5-day IB Maths course, which will run for three hours each session. Indrani says about 20% of the learning will be concept-based learning, to ensure students are properly introduced to the various topics offered for both AI and AA.

Then, about 40% of the lesson will be spent getting students to figure out why they need to do these courses, how they're going to employ all these equations that are on the board, and how they apply these to problem solving questions they'll have to approach in the exam.

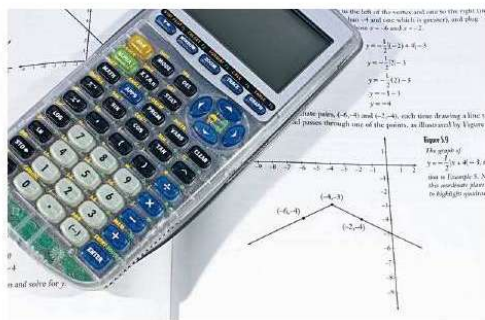
This investigative approach to learning will be beneficial for students in the long run, as those who wish to take HL will have to sit a third exam paper during which all these new skills can be applied for maximum results.

What's one last piece of advice that Indrani has for students going into the new IB Maths programme? "Make sure you are well-informed about which subject you want to take," she says. "Don't listen to whispers and gossip about whether AA is easier than AI; if it's HL it's HL!"

"Also, just remember to study hard and prep early because if you make a sound judgement, you can enjoy the courses – and the IB Maths course is really a fantastic curriculum."



Indrani Banerjee, The Edge Test Prep Tutor



Regarding the changes, Indrani agrees with the focus of the IB on using technology to teach Maths. As technology becomes increasingly more adapted by IB –

The Edge Learning Center

Causeway Bay

Address 2/F, The Zoroastrian Building, 101 Leighton Road, Causeway Bay, Hong Kong
Tel 2972 2555

Mong Kok

Address 2/F, Kelly Commercial Centre, 570-572 Nathan Road, Mongkok, Hong Kong
Tel 2783 7100

Website theedge.com.hk