# **Specialist Development Programmes**



## **Secondary Mathematics**

### Differentiating Secondary Mathematics Lesson for Classroom | PDSLEII

3 Credits



A 'one-size-fits-all' math lesson may not necessarily be effective for classroom instruction as students come with different backgrounds. The lesson will then need to be adapted according to student's readiness, interest and learning profile. In this webinar, we will show you how to apply different strategies to create differentiated lesson for secondary mathematics.

### **Developing Visual Skills in Secondary Mathematics** PDSLE14

3 Credits (LIVE)



Language used in secondary mathematics is generally more symbolic and concepts are more abstract than those in primary mathematics. As such, students may find it difficult to make sense of mathematics in their learning. In this webinar, we talk about helping students to make use of visual skills in learning secondary mathematics. Through visualisation, students will understand concepts better and retain the knowledge longer than mere rote learning.

#### Bar Model Method and Algebra PDSLE16

3 Credits



The bar model method has been an effective pictorial way to solving word problems in primary mathematics. In secondary mathematics, problem-solving tends to be more algebraic than pictorial. Such change in approach presents itself a gap in students' learning process. This course demonstrates ways to help students transit from the bar model method to algebra and addresses why students need to change their mindset from using bar models to applying algebraic methods.

## Transition from Bar Model to Algebra | PDSLE22

3 Credits



Bar model has effectively served its purpose for primary mathematics. As it is a precursor to algebra, a need arises to enable students to transit smoothly from bar model to algebra when they move on to secondary mathematics. In this webinar, we address how to provide a smooth transition from bar model to algebra. As students wean off the use of bar model, they will eventually embark on algebraic thinking in secondary mathematics.