



Professional Workshop

A Holistic Approach to Learning and Teaching Mathematics

Overview:

Topics to be covered at the Workshop:

- Introduction to Gateways Approach to learning Math -
Mindset + Conceptual Understanding + Fluency Model
- Fluency:
What is Fluency?
Which approaches are most effective
Explore strategies to build fluency in the classroom
- Mindset:
What is the impact of Mindset on Learning math?
Explore strategies to build a Growth Mindset in the classroom

Why the Gateway Approach

Read the situation below and answer the question - Who needs more help?

Priya is able to work out a complex, unseen multiplication problem but needs a calculator to help her with all number computation. Kelly can do the same problem without a calculator, but only if she has been shown a strategy to solve it once before. Who needs more help?

If you answered BOTH, Priya and Kelly, then you're bang on!

A common debate amongst Math educators for years has been - Which is more important - Conceptual understanding or Computational/ Procedural Fluency? However, research tells us these two areas are truly interdependent and each cannot be developed without the other - and the debate should **not be about WHAT is more important to teach** - Conceptual understanding or Fluency but rather **HOW do we teach for Conceptual Understanding and Fluency.**

Now we also have Raj who doesn't even get to the problem solving bit because he believes he is not a math person. He is convinced he will fail and refuses to attempt anything on his own in the math class. An equally powerful revelation of research is the **impact of Mindset on learning Math**. The work of renowned professors like Jo Boaler and Carol Dweck make a strong case for us to look at a Growth mindset as a prerequisite for achieving any Conceptual/Fluency goals in Math.

In this workshop, we highlight the importance of addressing all three areas - Mindset, Conceptual Understanding and Fluency in the process of learning math, and also explore ways in which we can do this in the classroom.

Relevant for: mainstream mathematics educators and special educator

When: 12th September 2015, 9:00 am - 3:00 pm.

Where: The Gateway School of Mumbai

Address: Sion-Trombay Road, Next to Deonar Bus Depot, Diagonally opposite TISS, Govandi (E), Mumbai - 400088.

Cost: Rs. 2500 per participant (Snack, Lunch and Materials included).

Registration:

Email: pd@gatewayschoolmumbai.org

Contact Number: 022-25563613/ 14

Registrations will be accepted on first come first serve basis. Only 50 seats available.