### Mathematics Toolkit: Conceptual understanding (whole school event)

# Educator Solutions

## Maths must now be taught for greater understanding to achieve greater depth.

#### **Course Outline**

The aims and expectations of Ofsted, the New Curriculum and New GCSEs, create a very different landscape for how teaching now needs to happen. Many of these new aims and expectations are based on the teaching methods of leading PISA countries and Singapore is one of these countries who teaches maths better than most including the UK. One of the key learning principles behind Singapore maths is developing conceptually understanding, particularly through the concrete, pictorial abstract approach, often referred to as CPA. The concrete-pictorial-abstract approach is based on research by leading psychologist Jerome Bruner, this approach is essential for pupils to develop a deep understanding of a concept. While Richard Skemp's research on relational and instrumental understanding, allows us to appreciate the importance of conceptual understanding.

#### By the end of the course participants will:-

- explore what is meant by conceptual understanding
- be familiar with the CPA teaching approach
- explore manipulatives which aid the development of conceptual understanding.

Up to 4 delegates per school/partnership	£400
Up to 8 delegates per school/partnership	£600
Up to 12 delegates per school/partnership	£840
Up to 16 delegates per school/partnership	£960
Up to 20 delegates per school/partnership	£1100

#### **Phase**

Primary and Secondary

#### **Audience**

All staff

#### **Trainer**

Rose Keating

#### **Date**

02/09/2016

#### **Time**

9:30 am - 4:00 pm

#### Venue

West Norfolk Professional Development Centre

#### **Course Ref**

TLS-0916-T020

