

# Contextualisation Practice Study

## Using the Realistic Mathematics Approach (RME) in the classroom

**Centre:** Cambridge Regional College    **Name:** Michael Lancaster, Project Manager

Cambridge Regional College is one of the 21 Centres for Excellence in Maths (CfEM) and has been using the Realistic Mathematics Education (RME) approach in their maths teaching. We've spoken to Michael Lancaster, Project Manager on the CfEM programme at Cambridge Regional College, to learn more about the approach and how the teachers and students at Cambridge Regional College have benefitted from it.

### What practice has your centre been doing relating to the key principles for contextualisation?

We have been using the RME approach for approximately four years to teach for robust understanding. An example lesson is introducing the context of booking a function room at a hotel and then showing a graph as a visual representation of the cost. Students are asked questions designed to engage them with the context and make sense of it. This helps them build their confidence in the maths involved before they are introduced to the algebra of an equation of a straight line. It is very important not to rush the introduction of formal maths procedures so that students have time to develop their understanding and confidence.

### Which key principles is your work exploring?

This work explores all three of the contextualisation key principles.

- Key principle 1: Choosing contexts carefully
- Key principle 2: Staying in context
- Key principle 3: Active learning

### Why did you decide to introduce this approach?

I attended a 'Making Sense of Maths' teacher workshop in June 2015 led by Sue Hough at Manchester Metropolitan University. Sue has trialled the RME approach in the post-16 sector. The idea of helping students to make mathematical connections to a familiar, real-world context appealed to me.

### How did you approach introducing this way of working?

I started using examples from the 'Making Sense of Maths' textbooks with my students. I received a positive response from students who were able to make sense of the context and visual representations to build their confidence and competence in proportional reasoning.

### How long have you been using this approach and how many teachers and students have been involved?

We have been using this approach for approximately 4 years and it has involved two teachers and 200 students.

### What do you think the outcomes have been? Why do you think it has been effective?

We have experienced a change in the culture of the classroom since using the RME approach. There has been a move away from the rote learning of abstract mathematical procedures to an expectation that students will be able to make sense of the maths, build their confidence and improve their results.