



Developing Confident Problem-Solving and Skills at Key Stages 3 and 4

Following the introduction of the 2014 National Curriculum for Mathematics, schools have been challenged to adopt pedagogical approaches which enable pupils to develop confidence in their problem-solving and reasoning skills. Both elements require pupils to gain strong conceptual understanding of mathematics as well as confident fluency in using and applying core skills and knowledge. Recent GCSE examinations confirm that convincing reasoning and problem-solving skills form clear pre-requisites for success within the assessment structures for secondary-aged children.



This series of two full-day workshops has the following aims:

- To enable participants to build on, share and extend current best practice within the fields of problem-solving and reasoning.
- To extend teachers' abilities to strengthen pupils' problem-solving and reasoning skills as a vehicle for enhancing pupil progress in mathematics.
- To provide opportunities for participants to develop, trial, evaluate and share ideas that exemplify effective practice.
- To generate opportunities for participants to set up mutually supportive networks for ongoing work on problem-solving and reasoning within the field of learning and teaching of mathematics.

Session 1 - Exploring the nature of effective problem-solving and reasoning

Through use of video footage, active engagement with mathematical activities and informed discussion, this session will aim to enable participants to explore and understand the key pre-requisites and dispositions for effective problem-solving and reasoning. It will provide opportunities for participants to share experiences as well as to enhance their thinking on how pupils' skills and confidence in these key areas might be promoted in the classroom.

Session 2 - How is it going so far? Where to next?

In this session, participants will share and evaluate their experiences of trialling strategies and approaches developed in Session 1. We shall also re-visit and critique the strategies discussed and developed in Session 1. The teaching school will enable participants to share resources and promote cross-school networking as a mutual support strategy.

These workshops will be facilitated by Dave Benson from the University of Derby. Dave is an experienced Secondary practitioner and the Mathematics Subject Leader on the University of Derby's Initial Teacher Education Programme.

Session details:

Session	Date	Timings	Venue
Session 1	4 February 2019	3.00 - 5.00pm	TBC
Session 2	18 March 2019		

To book email: katie.felstead@transformtrust.co.uk