



CIMT / TDA Training Modules

MODULE MEMA520

Effective Mathematics Teaching

This is one of a series of modules funded by the *Teacher Development Agency (TDA)*, with the aim of enhancing mathematics teaching in primary and secondary schools in the UK.

This module enables participants to focus on effective practices to enhance the teaching of mathematics, with a strong focus on whole-class, interactive teaching. It will give participants the opportunity both to improve their own practice by learning from others and to evaluate the impact of resources, including ICT.

Level: M

Credits: 30

Pre-requisites: None

Assessment: 100% Coursework

COURSE STRUCTURE

The module consists of 3 sessions (each of about 2 hours' duration) together with related assignments and tasks. The outline of the sessions and tasks is given below.

Session 1 This covers the key aspects of whole-class interactive teaching, including:

- theoretical and historical background
- research results confirming its effectiveness
- video clips of effective practice
- effective management of classroom and resources
- optimum teaching strategies for building a whole-class ethos
- questioning techniques and formative assessment
- pupils explaining their thought processes and working at the board
- the teacher as the orchestrator of the lesson.

TASKS/ASSIGNMENTS:

- Reading relevant articles on the topic (reading list provided)
- Self-evaluation of current teaching methods and resources

Session 2 The problems and difficulties in trying out new teaching strategies are discussed.

Web sites for accessing useful teacher and pupil resources (including schemes of work, lesson plans, topic information, computer programs, interactive material, diagnostic tests, etc.) and how to use them effectively. How to identify new contexts for motivation and making maths relevant

TASKS/ASSIGNMENTS:

- Experimenting with your teaching approach and use of resources
- Monitoring pupils' progress and engagement in learning
- Evaluation of your teaching.

Session 3 The main objective of this session is to

- listen to and discuss the reports from participants,
- reflect on the next stages for individual professional development,

and to complete an impact report and outline the extra work required (essentially a report of activities) for those wishing to extend the course for Masters Degree assessment.

ASSESSMENT

Initially all participants will be registered as modular Masters Degree students, although it is entirely optional as to whether participants complete the final portfolio required for external assessment; that is, participants can take the course as a stand-alone short course.

FEES The TDA will fund up to 60 credits (e.g. 2 modules) per academic year for qualified teachers teaching in state schools.

PARTICIPATION

Please contact CIMT (Email: margaret.rodick@plymouth.ac.uk, or phone 01395 255521) if you would like us to run this module at your school. (Note that we would expect the whole mathematics department to be involved.)