Specialist Knowledge for Teaching Mathematics (Secondary Teaching Assistants) Programme

NCP25-32

Phase
Secondary

Project year
3

Strategic goal
Secondary

Professional development type
SKTM programme

What are the intended outcomes?

Student outcomes

Students will:

- demonstrate a positive attitude towards the learning of maths
- think, reason and discuss their maths in order to deepen their understanding.

Practice development

Participants will:

- review their practice as a result of the sessions and make specific adaptations to support the students they are working with
- use appropriate mathematical language and representations with confidence.

Professional learning

Participants will:

- enhance their maths specialist knowledge with a particular focus on mathematical structures and representations in each of the following topic areas:
  - Addition and subtraction (extending to negative numbers)
  - Multiplication and division (extending to negative numbers)
  - Fractions
  - Ratio and proportion
- work towards developing their understanding of how to suitably work towards developing their understanding of how to suitably scaffold support/resources to meet the needs of their students
- develop an understanding of how algebra relates to the generalisation of number.

Participant information

This programme will be relevant for teaching assistants who work for most of their time with students in the KS3 maths classroom, or who lead intervention sessions with groups of students. The participants' schools should already be engaged with a Teaching for Mastery Work Group, and this programme will complement this provision. There are core materials for all SKTM programmes that Cohort Leads will use as the basis of their local programmes. The core materials incorporate tasks from a variety of sources that demonstrate progression from KS1 to KS3 in key number concepts.

The programme will be run over the equivalent of four days (hubs decide whether the programme is delivered face-to-face, blended, or online), and participants must commit to attending all sessions. Participants will develop their specialist knowledge with a focus on using precise mathematical language, representations and reasoning within each of the topics: addition and subtraction; multiplication and division; fractions; and ratio and proportion. In addition to attendance at these sessions, participants will be asked to carry out school-based tasks to enable participants to develop their practice in the classroom.