|  |  |  |  |
| --- | --- | --- | --- |
| **NCP23-29a: Specialist Knowledge for Teaching Mathematics (Secondary ECT) Programmes** | | | |
| **Phase** | Secondary | **Strategic goal** | Secondary |
| **Project year** | 3 | **Type** | SKTM Programme |

## **NCP23-29a Project details**

|  |
| --- |
| **Why is this project needed, what does it involve and what are the common features across the intended activity?** |
| This programme aims to offer high quality maths support and challenge for Early Career Teachers.  Whilst recognising the requirements of the Early Career Framework, the programme will provide a subject-specific focus for the Early Career Teacher that enhances the statutory offer. It provides an opportunity for the focus to remain on the teaching of maths. Pulling on NCETM resources and the expertise of the Cohort Lead, the Early Career Teacher will have the opportunity to work with teachers at a similar stage of their career, participating in a programme that is sufficiently bespoke to meet their needs. Lessons learnt from the work in previous years suggests the focus on maths and the opportunity to network are valued by Early Career Teachers.  The programme will build on the knowledge gained during initial teacher training. This will be achieved by focusing on one area of maths in detail: multiplicative reasoning – a key idea underpinning a number of concepts within maths. By considering three elements – observing learning, task design, and lesson design – over an equivalent of three or four days, the Early Career Teacher will be supported in designing effective learning and teaching for maths. All sessions will include opportunities that will meaningfully impact on their classroom practice.  This programme is the first year of a two-year programme. The second year is recommended, but optional, with the two elements being designed together to make a coherent offer for an Early Career Teacher of secondary maths. |

|  |
| --- |
| **Who are the intended participants in this project and what is the expected commitment?** |
| Participants will be those identified as Early Career Teachers – teachers in their first or second year of teaching. If participants were unable to engage in their first two years, Maths Hubs can consider those in their third year of teaching.  In order to engage with this programme, participants will need to ensure they are able to attend each session with their local group and ensure that their headteacher supports their attendance. The sessions will be equivalent to three or four days over the academic year.  Participants are expected to engage fully with the sessions and the practice-related tasks that will be set between sessions. Sharing learning from these tasks will be part of the programme activity, so participants must be prepared to engage with this. Participants will also share expertise through an online community, so there will be an expectation that they contribute to this. |

## **NCP23-29a Project outcomes**

|  |
| --- |
| **What are the intended outcomes of this project?** |
| **Student outcomes**  Students will:   * engage with confidence when faced with appropriately challenging content within a task * reason with increasing confidence in response to effective questioning within the classroom. |
| **Practice development**  Participants will:   * observe closely their students’ engagement with the task or lesson, considering the implications of what they notice on their practice * recognise that by anticipating student responses, effective questioning can take place within their classroom * consider task and lesson design, with their students’ needs in mind * engage constructively with colleagues and mentors, sharing with them the professional learning taking place within this programme. |
| **Professional learning**  Participants will:   * recognise appropriately challenging content within a task or lesson, and be supported to anticipate a student’s response * notice aspects of students’ learning behaviour, and be able to share their observations * notice aspects of teaching for mastery within a given task or lesson, and be able to articulate their purpose. |

|  |
| --- |
| **How have previous participants/schools benefitted from taking part in this project?** |
| **2021/22 Participant survey responses**   * 97% agreed that their knowledge of how to teach maths has deepened.   + The focus on multiplicative reasoning demonstrated how it underpins different areas of maths and the connections and sequencing of ideas. * 94% agreed that they have changed something in their practice and that they were able to evaluate and adapt existing resources to meet the needs of their students.   + The focus on multiplicative reasoning enabled participants to develop practice around a core topic. Participants are now confident to use a range of representations in their teaching. * 87% agreed that their subject knowledge has been enhanced.   + Participants engaged in maths in order to develop pedagogical subject knowledge. Participant learning was developed through high levels of discussion in a safe environment. |