

Title	Challenging Topics at GCSE		
Phase	Secondary	Work Group Code	NCP 20 - 18
Project summary			
This project focuses on participant teachers working together to 'unpick' (i.e. analyse, deconstruct and trace through the curriculum) a challenging topic, developing insight into the associated difficulties and misconceptions to support teaching in the short term but also considering the implications for longer term curriculum design.			
Rationale			
These Work Groups address strategic goals relevant to secondary schools, specifically: supporting schools to address the challenges of teaching GCSE Mathematics so that all pupils develop deep knowledge, understanding and confidence, and are well prepared for progression to post-16 education.			
Intended outcomes			
Professional learning			
Participants will: <ul style="list-style-type: none"> • develop a deeper insight into the maths that underpins learning in a challenging topic, through unpicking and analysing the topic. • develop a deeper insight into the key issues and misconceptions behind the topic. • deepen their own subject knowledge and awareness of connections within the curriculum. • Participants and their colleagues in school will consider appropriate pedagogies for the topic. 			
Practice development			
Participants will: <ul style="list-style-type: none"> • identify misconceptions and plan a series of lessons to support pupils in the topic area. • use and evaluate appropriate pedagogies to teach the topic area. 			
Policies & approach			
<ul style="list-style-type: none"> • Participants will work with their departments to unpick and analyse topics to inform collaborative planning and development of schemes of work • Subject knowledge and pedagogy across the department will improve • Through the modelling of best practice in improvement planning, subject leadership will be supported and impacted. 			
Pupil outcomes			
<ul style="list-style-type: none"> • Pupils will gain a deeper understanding of the topic area and the underlying mathematics. • Pupils will develop a more connected understanding of the curriculum. • Pupil engagement and attitude in the topic area will improve. 			
Intended participants			
Two teachers to attend from each school.			



Features of the work group
Local Work Group design will follow a workshop – school-based task cycle, consisting of several workshops followed in each case by a specific school-based task. Workshops will provide opportunities for teachers to identify and analyse a key challenging topic area, to work collaboratively to develop pedagogical approaches to it, and to evaluate and discuss after teaching.