

# Teachers of maths: supply, training and development



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## There are not enough specialist teachers of maths in primary, secondary and further education. There is an urgent need to:

- attract more high-quality maths teachers into all sectors
- train all teachers to teach maths more effectively
- support teachers through high-quality, career-long professional learning and provide career opportunities for maths teachers to develop their knowledge and skills
- retain a greater proportion of the best teachers in classrooms.

- Urgently recruit and retain expert maths teachers in secondary and further education.
- Establish specialist teachers of maths in all primary schools.
- Provide high quality subject-specific professional development for all teachers of maths.

#### Where are we now?

#### There is a shortage of appropriately qualified teachers of maths.

- Many primary schools have no teachers with specialist training and expertise in teaching maths.
- Secondary schools have a shortage of 5,500 specialist maths teachers in England. (1)
- One quarter of those teaching 11-14 year olds do not have a maths-relevant qualification. (2)
- One in five maths graduates choose to go into teaching. (3)
- Across all subjects, almost one in four teachers leaves teaching within five years. (4)

#### Different routes into teaching contain different quantity and quality of maths-specific training.

- There is no guarantee of high-quality, maths-specific training across Initial Teacher Training (ITT) routes.
- In 2012-13, Ofsted reported that school-based models of primary ITT offered weak mathematical subject training. (5)
- Subject Knowledge Enhancement (SKE) courses provide an essential support for entry into maths secondary teaching for those with limited subject knowledge.

### There is no overarching, long-term strategy for career-long professional development.

- There are no guidelines about progression from novice to expert teacher of maths.
- Teachers' access to maths-specific professional development is variable and geographically inequitable.
- There is no system-wide quality assurance of professional development.
- The quality of maths-specific training provided through Teaching Schools is unknown. These schools are judged 'outstanding' by Ofsted but the grading does not require maths training expertise.
- Some highly effective programmes have been discontinued, such as the Primary Mathematics Specialist Teacher (MaST) programme.
- With the aim of coordinating and developing professional development from primary onwards in mathematics the Government in 2014 established over 30 'Maths Hubs'. (See Maths Snapshot: International comparisons.)