

Strategies for Government

Good teachers of mathematics are more likely to stay in the **teaching profession** when:

- *Public messages and actions promote the importance of mathematics and mathematics teaching as a high status profession.*
- *Government and its agencies are seen by mathematics teachers to be supportive and encouraging.*
- *National policy related to mathematics is decided in consultation with teachers, and changes are only implemented when evidence from trials shows them to be successful.*
- *Government funding supports grass roots developments, as with the Further Mathematics Network and the work produced by the Standards Unit, where teachers are actively involved at every stage.*
- *Sufficient time and funding are available for mathematics teachers to engage in sustained, subject specific professional development.*
- *Working conditions, particularly a manageable workload, are attractive to people with highly marketable skills.*
- *Assessment and accountability measures encourage good teaching which fosters longer term progression and wider interest in the subject.*

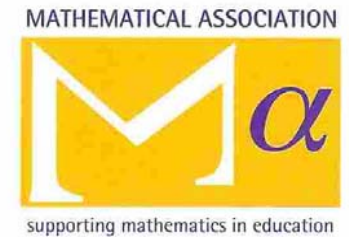


*With generous support from the Gatsby Charitable Foundation, the Mathematical Association has investigated factors that influence mathematics teachers in deciding whether to remain as teachers. The recommendations in this leaflet are based on the project report, *Career Patterns of Secondary Mathematics Teachers*, which is available free on request to 0116 221 0013.*

Some case studies of practices in mathematics departments related to the ideas in this leaflet can be found on our web site at www.m-a.org.uk.

The Mathematical Association, founded in 1871, works to support and improve the teaching and learning of mathematics. It is represented on all major bodies concerned with mathematics education in the UK and has wide influence through its members, publications and activities. Details of membership will be found on the web site.

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Retaining Good Mathematics Teachers in Schools and Colleges

Strategies for:

- *subject leaders;*
- *school leaders;*
- *government and its agencies.*



Mathematics is an important subject

- *Mathematics is a challenging subject which stimulates our curiosity and enables us to make sense of the world.*
- *Mathematics is vitally important to the economic well being of our society through its widespread applications to science, technology, business and finance.*

Good mathematics teachers inspire students and raise standards.

- *There is a serious shortage of good mathematics teachers in schools and colleges.*
- *Schools and colleges continue to find it very difficult to recruit and retain good mathematics teachers.*
- *The Training and Development Agency for Schools (TDA) and training providers have boosted recruitment in recent years, but the competition for graduates in mathematics and related subjects is, and always will be, intense.*
- *Many effective mathematics teachers leave the profession prematurely.*
- *Sustained efforts are needed at all levels to retain more mathematics teachers.*

Strategies for Subject Leaders

*Good teachers of mathematics are more likely to stay in a **mathematics department** where:*

- *An atmosphere of enthusiasm and interest about mathematics and improving the quality of students' learning pervades discussion.*
- *The departmental base serves as a social focus as well as a resource centre.*
- *Department meetings are used to stimulate interest in mathematics and its teaching. Most administrative matters are dealt with on paper or by e-mail with discussion only when key policy decisions have to be made.*
- *The importance of students' examination results is recognised, but is not so dominant that teaching for longer term progression and wider interest in the subject is neglected.*
- *Support and encouragement is given to all teachers, not just NQTs.*
- *Everybody's strengths and enthusiasm contribute to the department's thinking.*

Strategies for Senior Management

*Good teachers of mathematics are more likely to stay in a **school or college** where:*

- *The importance of mathematics in a range of subjects is appreciated and there is an enthusiasm for improving the quality of students' learning.*
- *Time is available for mathematics teachers to engage in sustained subject specific professional development.*
- *A departmental base which serves as a social focus as well as a resource centre is accorded high priority.*
- *Mathematics classrooms are properly resourced.*
- *The mathematics department is expected to use meetings to stimulate interest in mathematics and its teaching and not just to deal with administrative matters.*
- *The timetable is arranged so that protected time is available for regular department meetings.*
- *The importance of achieving good results is recognised, but testing and accountability measures are not so dominant that teaching for longer term progression and wider interest in the subject is neglected.*