Excellence in Mathematics Leadership (EiML)

Core Responsibilities (Secondary)

Developing a common purpose and a shared culture

Description



There is no agreed philosophy for the teaching of mathematics and observations demonstrate conflicting classroom climates, approaches and messages that hinder learning.

The department is insular: no communication is made with other stakeholders and as such it is not known whether or not they are able to make a positive contribution.

Discussion about teaching is usually negative and is focussed on classroom management rather than mathematics. The learning environment is not used to encourage a positive attitude towards the subject. The majority of students are negative about mathematics.

Moving to the next level

If you are category 4:

- How can you create a vision statement for mathematics?
- Which stakeholders is it important to involve?
- In what way might stakeholders be able to make a contribution?
- How can you encourage positive talk about mathematics within the department?
- How can you use the learning environment to promote mathematics?
- How can you investigate the reasons for students' attitudes towards mathematics and their image of themselves as mathematicians?

Description



A vision statement exists, though not all teachers have been involved in shaping it. A lack of consensus within the department sometimes lessens the effectiveness of developments.

The department inform and try to involve some stakeholders. This often proves to be a one-way process: no use is made of potential contributors from outside the department.

There is some informal talk about mathematics and the teaching of it. The learning environment is rarely updated and the quality of displays needs to be improved. Students' attitudes towards mathematics are mixed, and often reflect the variation of the enthusiasm and approach of teachers in the department.

Moving to the next level

If you are category 3:

- What steps could you take to involve all teachers in the creation and understanding of a vision statement for mathematics?
- How can you ensure that stakeholders recognise the importance of mathematics?
- What steps can you take to identify the contributions that stakeholders can make?
- How can you structure regular opportunities for the discussion about the teaching of mathematics?
- How can you improve the quality of the learning environment?
- How can classroom displays enhance teaching and learning?
- What steps can you take to ensure that students recognise the importance of mathematics?
- What steps can you take to ensure that all students enjoy mathematics?

Description



All teachers were involved in shaping the vision statement for the department, but there is inconsistent application of it in classroom practice and policy.

Stakeholders recognise the importance of mathematics, and some of them make positive contributions to the workings of the department.

The regular meeting time that is set aside for discussion of the teaching of mathematics is beginning to encourage this dialogue as a matter of habit. The learning environment is vibrant and colourful, but has a limited impact on learning. Most students enjoy mathematics and appreciate its importance but post-16 take-up is considered an area for development.

Moving to the next level

If you are category 2:

- How can you ensure that the vision crystallises shared beliefs and is reflected in classroom practice on a day-to-day basis?
- How can you ensure that positive attitudes about mathematics are reflected beyond the department?
- How can you ensure that stakeholders are pro-active in making a positive contribution?
- How long do you expect it to take before positive talk about mathematics and the teaching of it will become intrinsic to the workings and relationships within the department?
- How can you create a rich learning environment that values contributions from students and promotes a wider appreciation of mathematics?
- How can you develop a thirst for learning which is translated into greater numbers of students continuing with mathematical study?

Description

There exists a vision statement which all teachers have contributed to and feel they have ownership of. This statement underpins the entire workings of the department and is evident in the policy and practice observed on a daily basis.

The importance of the subject is recognised beyond the department, and other stakeholders make a positive contribution by sharing their expertise.

Mathematics and the teaching of it are discussed regularly, both formally and informally, as a matter of habit. The learning environment promotes an appreciation of the history, culture and beauty of the subject. These elements contribute to the enjoyment and thirst for learning which is evident across the school and beyond the classroom.

Moving to the next level

If you are category 1:

- Is there an agreed cycle for monitoring and reviewing the vision statement?
- Are there agreed and manageable systems for enabling stakeholders to make a positive contribution?
- How can you cultivate a positive engagement with mathematics beyond the department?
- Does the learning environment change periodically to reflect current teaching and learning?
- How can you encourage mathematical study post-18?