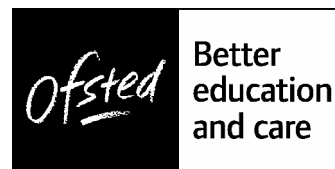


Alexandra House
33 Kingsway
London
WC2B 6SE

T 08456 404045
F 020 7421 6855
www.ofsted.gov.uk



12 February 2007

Mr S Howarth
Headteacher
The King's School
Brook Street
Grantham
NG31 6RP

Dear Mr Howarth

Ofsted 2006-07 survey inspection programme – mathematics

Thank you for your hospitality and co-operation, and that of your staff, during my visit 8 and 9 February 2007 to look at work in mathematics. As outlined in my initial letter, as well as looking at key areas of the subject, the visit had a particular focus on pupils' enjoyment and understanding of mathematics.

The visit provided valuable information which will contribute to our national evaluation and reporting. Published reports are likely to list the names of the contributing institutions, but individual institutions will not be identified in the main text.

The evidence used to inform the judgements made included: interviews with staff and students, scrutiny of relevant documentation, analysis of students' work and observation of parts of 11 lessons.

The overall effectiveness of the subject, mathematics, was judged to be outstanding.

Achievement and standards

Achievement and standards are outstanding.

- Students achieve very well, gaining very high standards in national tests and examinations.
- Because of skilful teaching, students gain a very good understanding of mathematical ideas, alongside the acquisition of knowledge and skills.
- Students are enthusiastic learners who have the confidence to ask questions and to put forward and test their ideas.

Quality of teaching and learning

Teaching and learning are outstanding.

- Teachers are very skilled at asking challenging questions and at adapting work to meet the needs of all students.
- Teachers provide many opportunities for students to work together; very good use is made of classroom whiteboards and interactive whiteboards to enable students to demonstrate their calculations and model solutions for others in the class.
- Good assessment of students' work enables teachers to plan lessons that meet the needs of all. Students are developing the ability to assess how well they are doing, though not all teachers emphasise this aspect of work with their classes.

Quality of the curriculum

The curriculum is good.

- The range of courses in Years 10 and 11 is well matched to the needs of students, with extension and additional mathematics courses available for the most able mathematicians. Gifted mathematicians are also able to study both mathematics and further mathematics in the sixth form.
- In some classes, not enough attention is paid to giving students opportunities to explore and develop their own strategies for investigating and solving extended problems.
- Teachers give freely of their own time to support students who need help; students enthusiastically take up opportunities to participate in a range of national mathematical challenges.

Leadership and management

Leadership and management are outstanding.

- The head of department gives a strong lead and is an excellent role model to other members of the department; he has a clear vision, based on high expectations, for further improving the department.
- Central to the department's success has been close collaboration, with teachers working extremely well together. Joint planning and analytical observation of each other teaching have been central to improving the quality of students' learning.
- The department makes excellent use of its resources; support for temporary or supply teachers is thorough and ensures that these colleagues maintain the quality of the department's work.

Subject issue: pupils' enjoyment and understanding of mathematics

Teachers are enthusiastic about their subject and model this enthusiasm in their work. They present lessons in interesting and stimulating ways, for instance by accessing websites to illustrate topics. Such approaches are available to all students because there is a strong measure of consistency in the quality of teaching in the department. Hence, students really enjoy their mathematics lessons. They appreciate the commitment of their teachers to help them when needed. Teachers

regularly encourage students to discuss their thinking and to model their ideas; the sight of several pairs of students presenting different methods for solving problems on class whiteboards is common and provides an excellent focus for discussion. As a result, students confidently develop conceptual understanding as well as acquiring skills. Students have a very good grasp of how each component of their courses fits with others because teachers make this clear.

Inclusion

All groups of students achieve equally well. This results from sensitive grouping of students by ability so that tasks and questions stretch and challenge them appropriately. Students for whom English is not their home language are integrated well into classes and their progress is similar to that of other students. Close monitoring of the progress of each individual helps ensure that no student under-achieves in mathematics. Good support is provided for individual students who may experience difficulty and members of the mathematics department give freely of their time to make this possible. The most able students are provided with additional courses and examination opportunities in order for them to be stretched.

Area for improvement, which we discussed, included:

- ensure that, in all classes, students are given opportunities to explore and develop their own methods and strategies for investigating situations and solving extended problems.

I hope these observations are useful as you continue to develop mathematics in the school.

As I explained previously, a copy of this letter will be sent to your local authority and will be published on Ofsted's website. It will also be available to the team for your next institutional inspection.

Yours sincerely

George Knights
Additional Inspector