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Mrs J Churcher  
Headteacher  
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Dear Mrs Churcher

Ofsted 2009-10 subject survey inspection programme: mathematics

Thank you for your hospitality and cooperation, and that of your staff, during my visit on 9 and 10 February 2010 to look at work in mathematics.

As outlined in our initial letter, as well as looking at key areas of the subject, the visit had a particular focus on the effectiveness of the school's approaches to improving the quality of teaching and learning in 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 included interviews with staff and students, scrutiny of relevant documentation, analysis of students' work and observation of six lessons.

The overall effectiveness of mathematics is satisfactory.

Achievement in mathematics

Achievement in mathematics is satisfactory.

- Students enter the school with below average attainment. Standards at GCSE are improving. The proportion who gained A\* to C grades in 2009 was close to 50% which is slightly below average. Results from early GCSE entry by current Year 11 students show 40% have already attained grades A\* to C. The school anticipates this proportion will rise in the summer 2010.
- Progress over students' time in the school is satisfactory. Lesson observations show that progress in lessons is inconsistent: when the

teaching is lively and engaging, progress is good but at other times it is satisfactory.

- Students whose circumstances make them vulnerable receive effective support that enables them to make good progress. Many arrive at times other than the start of Year 7 but are quickly integrated.
- Students' attitudes and behaviour in lessons are good. Students say they enjoy mathematics and appreciate the effort of staff in enhancement lessons provided outside of normal school times. They comment that individual support often enables them to understand what they have not fully grasped in lessons.

### Quality of teaching of mathematics

The quality of teaching of mathematics is satisfactory.

- There are significant areas of good and improving teaching within the department. The impact of recent support to improve the range of activities within lessons is evident. In the better lessons, clear development of concepts gives students a good understanding of the areas of mathematics taught. However, this is not consistent. In other lessons, there is a strong emphasis on teachers demonstrating techniques and students practising them.
- Good use is made of interactive whiteboards to enhance learning. At present, the fabric of the building does not allow them to be installed in all classrooms and consequently not all students benefit from the opportunities they can provide.
- Some teachers make effective use of assessment by questioning students and using responses to eradicate misunderstandings, often using these as teaching points. Although all teachers monitor the work of students in lessons, the quality of marking is inconsistent. At times, it does not identify errors or support students by advising them on how to improve.

### Quality of the mathematics curriculum

The quality of the mathematics curriculum is satisfactory.

- Schemes of work identify appropriate mathematical content across different units and by levels of prior attainment. All students take GCSE mathematics in the November of Year 11 and then continue either to try and better their grade or to study elements of A-level mathematics.
- Enrichment classes provide good focused support and are well received by students.
- Elements of 'using and applying mathematics' are used within some lessons but these are not planned systematically and students do not develop good investigational and reasoning skills. Although teachers use information and communication technology (ICT) through the interactive

whiteboards, students do not use computers regularly to enhance their understanding of topics such as graphs and geometry.

## Effectiveness of leadership and management of mathematics

The effectiveness of the leadership and management of mathematics is satisfactory.

- The subject leaders take responsibility for one key stage each. They work well together and have a satisfactory overview of the key strengths and weaknesses within the department. At times, lesson observations do not focus on specific areas of teaching and hence do not identify exactly what needs to be improved. There is a clear plan to continue to raise standards, including ensuring appropriate support and resources.
- You have worked well to ensure the department is fully staffed with appropriately qualified mathematics teachers. Opportunities for trainee mathematics teachers to undertake placements at the school have led to some of them subsequently taking up posts at the school. Clear plans are in place to further strengthen the team. The department rightly recognises that when all elements are fully in place it has a good potential to continue to improve.

Subject issue: the effectiveness of the school's approaches to improving the quality of teaching and learning in mathematics

- The school has improved the overall quality of teaching in mathematics. Suitable support, including close working with an advanced skills teacher, is helping to strengthen teaching.
- Members of the department support each other well and collaborate on developing teaching ideas. Good teaching methodologies and practices are discussed informally on a regular basis.

Areas for improvement, which we discussed, include:

- continuing to raise standards in mathematics by:
  - ensuring students are consistently challenged and the pace of learning increased
  - sharpening subject leaders' monitoring of classroom practice, through focusing on specific areas and identifying what needs to be improved
- improving the quality of teaching so that:
  - lessons actively support students' understanding as well as practising skills
  - assessment is used effectively to identify errors and inform students how to improve
- ensuring the curriculum includes more opportunities for all students to:

- develop and practise investigational and reasoning skills
- use ICT to enhance their understanding of mathematics.

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

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

Yours sincerely

Michael Smith  
Her Majesty's Inspector