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## 21 October 2009

Mrs N Waters
Headteacher
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**Dear Mrs Waters** 

Ofsted 2009-10 subject survey inspection programme: mathematics

Thank you for your hospitality and cooperation, and that of your staff, during my visit on 5 and 6 October 2009 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. All feedback letters will be published on the Ofsted website at the end of each half term.

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 11 lessons.

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

Achievement in mathematics

Achievement in mathematics is satisfactory.

■ Before 2007, standards in GCSE mathematics had been rising steadily to become broadly average. In 2008, results dropped markedly, mainly because a much larger than usual proportion of students failed to complete the course and sit the examinations. You and the subject leader analysed the problem carefully and put in place appropriate procedures to ensure that results in 2009 were better. These results showed

improvement, back to slightly above the 2007 figures. Hence standards are broadly average.

- Progress over time has been satisfactory. Lesson observations show that progress in lessons is good when the teaching is engaging but at other times it is satisfactory and, on a few occasions when behaviour inhibits learning, it is slow.
- Standards at A level have remained broadly average with increasing numbers of students completing the further mathematics qualification. Staying on rates from AS to A level are good. Overall students make satisfactory progress in the sixth form.
- Students' attitudes in lessons are variable. Behaviour can be good but is mainly satisfactory. In some lessons, immature off-task behaviour limits progress. In the best lessons, students are highly motivated and enjoy the work. This is particularly true in the sixth form.

Quality of teaching of mathematics

The quality of teaching of mathematics is satisfactory.

- There are significant areas of good and some outstanding teaching within the department, but also some ineffective practice. You have worked hard with colleagues to improve weak performance and have raised the overall quality of teaching.
- Lessons start with students writing lesson objectives into their books. However, these are rarely discussed with students or referred to at other times within lessons. The initial activity is often based around a problem whereby teachers ascertain students' understanding of the topic. However, because the mathematics teaching rooms can be quite distant from students' previous lesson, lessons often get off to a late start and some students, who have been waiting for others to arrive, become restless and lose interest.
- When teaching is good or outstanding, activities are purposeful. Effective use of a combination of investigations and group work means that students are quickly engaged in activities, discussing their work and making good progress.
- Staff and students make good use of interactive whiteboards and the department's laptops, for instance in supporting students in sketching different graphs and their asymptotes.

Quality of the mathematics curriculum

The quality of the mathematics curriculum is satisfactory.

- Schemes of work identify appropriate mathematical content across different units targeted at students of differing levels. These include a variety of investigations and links to suitable activities using information communication technology (ICT). Schemes also identify 'focus weeks', which are units of targeted work that aim to overcome specific areas of weakness. For example, Year 8 students had recently had intensive teaching on directed numbers.
- Support for teaching within each unit is presently being developed with the intention that each will include suitable teaching activities. Students are appreciative of the variety of extra classes which support them as they prepare for examinations.
- When students start at the school in Year 8, the work is planned to consolidate and extend that covered in previous schools. However, many students find that they are needlessly repeating work.
- Good use has been made of outside support to deliver a taught further mathematics advanced level course. The school has now been able to staff these lessons itself.

Effectiveness of leadership and management of mathematics

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

- The subject leader has a good overview of the key strengths and weakness within the department, based upon accurate lesson observations. This is used to formulate a clear plan to carry on improving the overall quality of teaching and the pace of learning. While these actions are bringing about improvements, as yet outcomes remain satisfactory rather than good, and there is little evidence of a strong upward trend.
- Accurate analysis of GCSE results in 2008 identified shortcomings and the school has done well to reverse the downward trend. Similar analysis of 2009 results has identified where the school needs to develop next and plans are in place to bring about such improvements. Greater support for the subject leader by other members of the department means the department is better placed to speed up improvement.

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. Lesson observations have been used to identify areas of strength and weaknesses accurately. Suitable support has been put in place and is helping to eradicate weaker teaching.

Members of the department support each other well and collaborate on developing teaching ideas. They regularly discuss good teaching methodologies and practices. Good use has been made by the local authority's consultants to support improvements to the quality of teaching.

Areas for improvement, which we discussed, included:

- continuing to raise standards in mathematics by:
  - ensuring students get off to a purposeful start in Year 8
  - building suitable teaching activities into the schemes of work to ensure all students are enthused and challenged
- improving the quality of teaching by:
  - making sure that lessons start briskly
  - sharing lesson objectives effectively with students to identify what needs to be learned and revisiting them at the end of lessons to assess progress
  - disseminating good practice.

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

As explained in our previous letter, a copy of this letter will be sent to your local authority and local Learning and Skills Council 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