Aviation House 125 Kingsway London WC2B 6SE T 0300 123 1231 F 020 7421 6855 enquiries@ofsted.gov.uk www.ofsted.gov.uk



18 October 2011

Mrs HM Lennie Headteacher Rastrick High School Field Top Road Rastrick Brighouse HD6 3XB

Dear Mrs Lennie

# **Ofsted 2011–12 subject survey inspection programme: mathematics**

Thank you for your hospitality and cooperation, and that of the staff and students, during my visit on 11 and 12 October 2011 to look at work 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 without their consent.

The evidence used to inform the judgements included: interviews with staff and students; scrutiny of relevant documentation; analysis of students' work; and observation of five lessons, together with shorter visits to an additional nine lessons.

The overall effectiveness of mathematics is good.

### Achievement in mathematics

Achievement in mathematics is good.

- Students' average attainment is illustrated by the 2010 GCSE results, when 67% of students gained a grade A\* to C, compared with the national average of 64%. The unvalidated 2011 results are similar to those in 2010 and the school's records indicate that current students are likely to maintain the school's upward trend in results. In 2011, a greater proportion of girls than boys attained the highest A\* and A grades.
- Students, including those with special educational needs and/or disabilities, make good progress in lessons and over their time in the school. Relative to their starting points, they make more progress than similar students in other schools.

- Sixth-form students' achievement is satisfactory. Attainment is average and students make satisfactory progress relative to their starting points. While, in recent years, some students have underachieved in Year 12, additional guidance and support have improved the progress of current students so that more are on track to meet their targets than previously.
- Students generally apply themselves well to the task in hand. They work well in pairs, supporting the learning of others. Students show good algebraic skills, particularly in solving equations by a variety of methods. Weaker students lack confidence in dealing with numerical work, such as negative numbers and fractions, decimals and percentages.

## **Quality of teaching in mathematics**

The quality of teaching in mathematics is good.

- Teachers make good use of assessment information to inform their planning and adapt the pace of the lesson. Where possible, they make links with other areas of mathematics and with students' prior learning. They use starter activities well to revise and consolidate earlier work.
- Teachers show enthusiasm and have a lively and positive approach in lessons; they encourage students and try to raise aspirations. Most teaching aims to develop students' understanding rather than focusing solely on techniques but, occasionally, the mathematical methods taught are not fully discussed or explained.
- While teachers are conscious of trying to develop students' subject-specific vocabulary, students would benefit from additional opportunities to use new or unfamiliar vocabulary for themselves.

### Quality of the curriculum in mathematics

The quality of the curriculum in mathematics is good.

- The curriculum meets students' needs well. In recent years, all who have entered the GCSE examination have successfully gained a grade A\* to G. The small numbers for whom GCSE qualifications are not appropriate secure suitable alternative qualifications. In the sixth form, in addition to A-level and AS mathematics, an option to study further mathematics is available. Timetabled sessions support students who wish to retake their GCSE examination.
- At Key Stage 3, a very detailed scheme of work offers very strong guidance and structure for different ability levels. In addition, it provides suggested focus questions for plenaries that provide excellent ideas for probing students' understanding. The schemes of work at Key Stage 4 and in the sixth form follow closely the guidance published by the awarding bodies. Additional guidance to supplement the Key Stage 4 scheme, through giving reference to supporting resources and tasks, is in development.
- Department leaders are aware that a set of open-ended activities which focus on developing students' skills in using and applying mathematics

needs to be more fully integrated into the schemes of work to provide a more structured build up of skills and avoid any risk of duplication.

Students appreciate the opportunity to study at home using subjectspecific software on the school's intranet.

### Effectiveness of leadership and management in mathematics

The effectiveness of leadership and management in mathematics is good.

- Leaders and managers provide strong leadership in developing teaching and learning within the department and contribute to developments more broadly across the school. They are playing a leading role in the school's drive to develop students' numeracy.
- GCSE results show a steady trend of improvement and more students are achieving well relative to expectations. Students' attitudes to mathematics have improved and the numbers choosing to study mathematics in the sixth form have risen.
- The school's systems have been sufficiently robust to manage the work of the department through a period of substantial staff turnover, while improving overall provision. Members of the department work well as a team and benefit from involvement in national initiatives.
- Self-evaluation is accurate. Improvement planning has an appropriate focus on outcomes as well as provision and integrates well with wholeschool planning.

### Areas for improvement, which we discussed, include:

- strengthening progression in students' learning through integrating openended and investigational tasks more fully into the schemes of work
- ensuring that the methods used to solve mathematical problems are discussed and justified mathematically
- continuing to raise achievement in the sixth form to match the good achievement in the main school.

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

As explained previously, a copy of this letter will be published on the Ofsted website. It may be used to inform decisions about any future inspection. A copy of this letter is also being sent to your local authority.

Yours sincerely

Paul Chambers Her Majesty's Inspector