

Aviation House
125 Kingsway
London
WC2B 6SE

T 0300 123 1231
F 020 7421 6855
enquiries@ofsted.gov.uk
www.ofsted.gov.uk



7 December 2011

Mr J Hourigan
Headteacher
Priory Sports and Technology College
Crow Hills Road
Penwortham
Preston
PR1 0JE

Dear Mr Hourigan

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 28 and 29 November 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; observation of four lessons and a series of shorter visits to lessons.

The overall effectiveness of mathematics is satisfactory.

Achievement in mathematics

Achievement in mathematics is satisfactory.

- Attainment in mathematics by the end of Key Stage 4 is broadly average overall. As a result of a drive to improve the proportion of students gaining A* to C in GCSE mathematics, this measure rose in 2011 to 73%, compared with the national average of 65%. A greater proportion of boys than girls reached this benchmark. Similarly, although the overall proportion of students achieving grades A or A* was close to that seen nationally, a significantly higher proportion of boys did so than girls.
- Students enter the school with attainment that is broadly average and make progress in line with expectations. In 2011, the proportion of students making the expected three levels of progress during their time in school was slightly below the national average. Evidence collected during the inspection confirms that current students make satisfactory progress in

lessons and over time. Students with special educational needs and/or disabilities make progress in line with that of their peers, although they make better progress in targeted and small-group provision than in mainstream lessons, where tasks and activities are not always sufficiently well adapted to meet their needs.

- Students respond well to adults and to each other, and their good behaviour makes an effective contribution to learning. They show positive attitudes to mathematics and they learn techniques and skills well. Students' skills in using and applying mathematics are weaker than in other aspects of the curriculum. As a result, they are less confident when tackling unfamiliar or unstructured problems.

Quality of teaching in mathematics

The quality of teaching in mathematics is satisfactory.

- In the best lessons, teachers draw on assessment information well to pitch lessons appropriately. Regular and effective use is made of questions from previous examination papers to familiarise students with standards at their target grades.
- While emphasis on developing students' conceptual understanding is increasing, many students are exposed to and rely upon applying rules and algorithms that they do not understand fully. Discussions with students and a scrutiny of their work show many do not get sufficient opportunity to tackle a wider variety of problems in more depth because too much time is spent securing lower-level material. Planning does not identify clearly how activities will be adapted to meet the needs of all groups of students in the class. As a result, learning slows where the whole class is required to complete the same task at the same rate.
- Activities that promote small-group or paired discussions are effective in helping students to reason through and discuss their mathematics before sharing their responses with the whole class. In some lessons, however, questioning is overly directed or answers are accepted from those few students who respond first. As a result, correct answers are given more prominence than students' methods and some students, particularly girls, become reluctant to contribute to whole-class discussions.

Quality of the curriculum in mathematics

The quality of the curriculum in mathematics is satisfactory.

- The curriculum generally meets the needs of all groups of students and contributes satisfactorily to their achievement. For example, all students passed GCSE mathematics at grades A* to G in 2011.
- A variety of intervention strategies, particularly in Key Stage 4, contributes well to improving outcomes. Students' progress is monitored effectively and the information used to target students for additional support.
- The teaching programme is based around awarding-body and commercially produced schemes, supplemented by externally available

materials and resources. A range of tasks and activities designed to promote students' conceptual understanding and problem-solving skills is being incorporated into schemes of work. However, guidance to teachers in using these approaches is underdeveloped.

Effectiveness of leadership and management in mathematics

The effectiveness of leadership and management in mathematics is good.

- The mathematics department is a cohesive team whose members support each other well. A commitment to raising achievement has resulted in improvement in the average point scores of students in mathematics at the end of Key Stage 4 in each of the last four years. Appropriate steps are being taken to extend the range of resources available to support students' conceptual understanding of mathematics.
- Data on students' attainment and progress is robust and reliable and is very effective in identifying those students at risk of underachievement. Self-evaluation shows a keen awareness of the performance of different groups. However, action plans do not identify sharply enough what will be done to improve teaching and learning because not all monitoring activities focus with sufficient rigour on the quality of students' learning and progress in lessons and over time.

Areas for improvement, which we discussed, include:

- improving the quality of guidance for teachers in developing students' conceptual understanding and problem-solving skills
- increasing the use of dialogue and discussion in mathematics lessons and ensuring that all students are enabled to move their learning forward at a pace more appropriate to their individual needs
- providing a sharper focus in monitoring activities on the quality of students' learning and progress in lessons and over time
- ensuring that the outcomes of monitoring inform more clearly action planning to improve the overall quality of teaching and learning.

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

Lee Northern
Her Majesty's Inspector