Aviation House 125 Kingsway London WC2B 6SE

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



26 November 2010

Mr M Jackson Associate Headteacher Archbishop Temple School, A Church of England Specialist College St Vincent's Road Fulwood Preston PR2 8RA

Dear Mr Jackson

# **Ofsted 2010–11 subject survey inspection programme: mathematics**

Thank you for your hospitality and cooperation, and that of the staff and students, during my visit with Jane Millward HMI on 11 and 12 November 2010 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 eight lessons.

The overall effectiveness of mathematics is outstanding.

## Achievement in mathematics

Achievement in mathematics is outstanding.

- Attainment at both keys stages is well above average. For example, in 2009, over 90% of students gained a grade A\* to C in mathematics compared with the national average of 60.2%, with over half of all students gaining a pass at the highest A\* and A grades. The unvalidated GCSE results for 2010 indicate a further rise in attainment over the 2009 levels.
- Students' achievement is outstanding. Students enter the school with attainment that is well above average and make excellent gains in their learning. The proportion of students of all abilities making at least the progress expected is much higher than that found nationally. Current students are making excellent progress in their lessons.

- There are no consistent differences in the progress made by different groups.
- Students' excellent attitudes to work contribute strongly to their outstanding progress. Students are attentive, keen to learn, and eager to offer ideas in class. The standard of behaviour in lessons is consistently high.

# **Quality of teaching of mathematics**

The quality of teaching of mathematics is outstanding.

- Teachers' strong subject knowledge enables them to focus on key aspects of learning and overcoming possible misconceptions. They use mathematical language and definitions precisely and this helps students to build their understanding quickly and securely. Students have a very good grasp of algebraic ideas and most are able to manipulate algebraic expressions with confidence.
- Teachers communicate well with students and develop very strong working relationships. They use information and communication technology (ICT) very effectively to introduce and illustrate mathematical ideas to the class. However, students themselves have only limited opportunities to use ICT in lessons.
- Teaching has a strong emphasis on developing conceptual understanding rather than solely focusing on techniques. Teachers justify results and offer reasons for approaching problems in a particular way. Students enjoy learning when they can work in pairs; they gain considerably from opportunities to discuss their understanding with peers.
- Teachers use a range of in-class assessments, including very effective use of mini-whiteboards, that provide quick and useful feedback on students' understanding. Some students draw considerable benefit from assessing each other's work. Students reflect on their own progress, can identify areas of weakness and know how they can work on overcoming them.
- Where students are in danger of falling behind or want extra help, teachers provide additional support, for example through extra classes or one-to-one tuition. Students value highly the opportunity to use a computer-based mathematics teaching programme that they can access at home.

## Quality of the mathematics curriculum

The quality of the mathematics curriculum is outstanding.

- The curriculum meets students' needs extremely well. Nearly half of all students choose to continue their mathematical studies at A level.
- Almost all students follow a GCSE programme in Key Stage 4 and gain accreditation at grades A\* to G. An individual programme of study is provided for the very few students for whom GCSE is inappropriate.
- The most able students take GCSE at the end of Year 10 and study for an additional mathematics qualification in Year 11. This is successfully

providing challenge for these students and is giving an excellent preparation for those intending to study the subject at A level.

The scheme of work ensures a full coverage of the National Curriculum, including developing students' skills in using and applying mathematics. The scheme of work is presented in a way that provides a firm structure, with guidance on teaching approaches and possible misconceptions that students might have; this contributes to the high proportion of good and better teaching that the students experience. Links to web-pages provide access to alternative methods and materials and help teachers to plan a variety of teaching approaches.

## Effectiveness of leadership and management of mathematics

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

- Staff display positive attitudes in continually seeking improvements. In the last three years, leaders have successfully raised further the high level of outcomes for students. In addition, they have improved provision, particularly for the most able students.
- Improvement planning is good. Leaders have an accurate view of the work of the department, including teaching. They can identify where improvements can be made and take actions to secure positive change.
- The department is making very effective use of students' views to improve provision and is playing a leading role in this whole-school initiative. Responding to students' views, teachers have made changes in classroom practice and support arrangements that have had a notable impact on promoting positive attitudes.
- Mathematics makes a strong contribution to the school's technology specialism. GCSE results exceed targets regularly and staff from the department have played a leading role in developing teaching and learning across the school.

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

enriching learning by giving students more opportunity in lessons to explore mathematical ideas using ICT.

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