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



6 December 2010

Mr D Herlihy Headteacher Royton and Crompton School Blackshaw Lane Royton Oldham OL2 6NT

Dear Mr Herlihy

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 Jones HMI on 23 and 24 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; observation of 12 lessons; and brief visits to eight additional lessons.

The overall effectiveness of mathematics is good.

Achievement in mathematics

Achievement in mathematics is good.

- Attainment is just below average when students join the school. GCSE results are on an upward trend and, in 2010, 68% obtained A* to C grades, which is higher than the national average. The average points score, which takes account of all students' results, is close to the national average.
- Students make good progress. The rate of progress is itself improving, but with some variability between classes.
- Students' learning is good. Students are almost always cooperative, active participants in class and enjoy practical and discussion-based activity.

Learning is best when students develop a thorough understanding of the topics they are covering, rather than simply focusing on techniques.

Students' skills in using and applying mathematics are less well developed than other areas of mathematics. Students experience some real-life applications of mathematics, but not enough reasoning and proof.

Quality of teaching of mathematics

The quality of teaching of mathematics is good.

- There is a core of very strong teaching in the department and some of the satisfactory teaching contains important strengths. Relationships are good. Teachers use interesting activities, with opportunities for paired and discussion work to support students' learning. In the best lessons, teachers focus on understanding and sequence activities well, anticipating and exploring students' misunderstandings. A strong emphasis on mathematical precision, both in work displayed on the whiteboard and in students' own work, promotes good understanding.
- Characteristics of the satisfactory teaching include lesson objectives that focus on techniques rather than understanding and lesson plans that do not encourage a smooth sequencing of learning. Teachers use interesting activities, but without real clarity as to what the students should learn from these.
- In day-to-day assessment, many teachers use misunderstandings shown by students well, turning them into teaching points for the whole class. Students know their baseline targets and are beginning to develop skills of self-assessment. Some teachers turn thoughtful questioning into a rich dialogue. However, many take answers mainly from volunteers and, so, are not aware of some students' difficulties or misconceptions.

Quality of the mathematics curriculum

The quality of the mathematics curriculum is good.

- Schemes of work are organised well and contain links to a range of interesting activities, including some that use information and communication technology. Teachers plan together well. This collaborative approach does not currently provide less experienced or non-specialist teachers with sufficient guidance on the best ways of teaching areas of mathematics.
- The new scheme of work in Year 9 aims to promote students' functional skills and is actively developing using and applying mathematics. However, because the key process skills are not made explicit in curricular and lesson planning, students' development and progression in them is uneven.
- The annual 'maths week' provides memorable experiences for students. A regular 'maths club' is valued by students who find a particular topic difficult or who have missed work and in the run up to GCSE examinations.
- Most students enter early for GCSE during Year 11. They are given careful individual advice on their options for the next two terms and beyond.

While many re-sit with the aim of improving their grades, some who have reached their target grade concentrate on other subjects.

Effectiveness of leadership and management of mathematics

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

- Team work is a strength of the department. All the teachers take an active part in a good range of monitoring activities. Although this has improved teachers' generic teaching skills and the presentation of students' work, it is not sufficiently focused on the mathematical learning of students and how it can be improved.
- Subject leaders have an accurate self-evaluation of the department and clear ambition about of what they want to achieve. They have secured steady improvement both within the school and in supporting other schools.
- Regular progress reviews for each student, leading to additional support where required, reflect the school's inclusive ethos.

Areas for improvement, which we discussed, include:

- incorporating explicitly the key process skills in the scheme of work and in lesson planning
- developing ways of sharing good practice in mathematics by:
 - ensuring that monitoring activity has a stronger focus on students' mathematical learning
 - reaching common agreement on the best approaches for sequencing and teaching key areas of mathematics.

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

Robert Barbour Her Majesty's Inspector