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



1 December 2010

Mr W Sedgwick Headteacher Alderbrook Leading Edge School and Arts College Blossomfield Road Solihull B91 1SN

Dear Mr Sedgwick

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 on 1 and 2 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 10 lessons and brief visits to three others.

The overall effectiveness of mathematics is good.

Achievement in mathematics

Achievement in mathematics is good.

- In recent years, attainment has been above average in mathematics. The proportion gaining grade C or better at GCSE is well above the national average, as is the average grade for all students.
- Students make good progress over time. Progress is particularly good for students whose attainment on entry is average or below average. Good learning and progress were evident in the students' work that I examined during the inspection but not always in the lessons observed.
- Relationships in the classroom are good. Students have positive views about mathematics and are appreciative of the commitment that teachers show. Students say that the best lessons have an element of challenge. They are better engaged when they are given an active role in the lesson.

Quality of teaching of mathematics

The quality of teaching of mathematics is good.

- The school judges the quality of mathematics teaching to be good, based on lesson observations by senior staff and by external consultants. This judgement is consistent with students' good progress over time and the work sample examined. However, it was not supported fully in some of the lessons observed.
- Lessons have clear learning objectives and there is an increasing emphasis on teaching that motivates and develops understanding. For example, teachers are introducing new ideas to support students' visualisation of mathematical concepts and to make the lessons livelier and more varied. However, some of the new approaches require further 'fine-tuning'.
- Some very good teaching and little that was less than solidly satisfactory was seen. All of the lessons had good elements, but teaching and learning were satisfactory more often than they were good. In two of the satisfactory lessons, the teachers presented enthusiastic but overlong introductions to low attaining groups. In two others, the teachers tried something new but the students did not respond quite as expected. Students in the higher sets were not always challenged fully.
- Students' progress is assessed through regular tests and by teachers marking homework assignments. Students are expected to mark their own classwork but not all teachers check the accuracy of this process regularly enough. In other respects, students have a good awareness of how they are getting on and what they need to do to improve.
- In lessons, teachers circulate as students work to check how well they are learning. In the best lessons, teachers use the information to adapt their teaching and to target extra support. This feature is less apparent in satisfactory lessons, either because too little time is allowed or because important clues about the nature of students' difficulties are missed.

Quality of the mathematics curriculum

The quality of the mathematics curriculum is good.

- The schemes of work provide a good basis for teachers to prepare lessons. Functional skills, including financial mathematics, are integrated into the curriculum and there are many suggestions for activities that allow students to use and apply mathematics.
- The whole-school curriculum includes a commitment to 'building learning power', an approach that aims to help students to develop their learning skills. However, it is not backed up with strong enough guidance at a subject level in mathematics. For example, students' skills in using and applying mathematics are not developed systematically enough.
- Academic support is targeted at students who are not progressing as expected. Teachers are always willing to help students who need help with particular topics. The school is making creative use of examination entry policy to maximise success in mathematics for the current Year 11.

■ The school is a centre for students who have moderate learning difficulties and/or speech and language difficulties, some of whom are quite talented mathematically. It adapts its programmes well to ensure all that all students can access an appropriate mathematical qualification.

Effectiveness of leadership and management of mathematics

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

- Mathematical achievement is increasing as a result of the strong drive and ambition shown by school and faculty leaders. Effective programmes of academic support and examination preparation are contributory factors.
- The faculty also has a long term strategy for improvement, based on adapting the schemes of work to engage students' interest better and improving the quality of teaching through the professional development of staff. It therefore has a good capacity for further improvement. However, the monitoring of lessons is not always sharp enough to pinpoint what more teachers can do to further develop students' understanding and to challenge high attaining students to devise their own solutions.

Areas for improvement, which we discussed, include:

- improving the consistency of assessment of students' classwork by clarifying the marking policy for teachers' oversight of work completed in class and marked by students and by supporting teachers to improve their use of in-class assessment to judge when to adapt the teaching approach
- refining the schemes of work to ensure that students progressively develop their skills in using and applying mathematics and to raise expectations for higher attaining students in all year groups
- ensuring that leaders pay close attention to the mathematical structure of lessons when monitoring or supporting colleagues to pinpoint what more teachers can do to make their teaching strategies more effective.

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

Stephen Abbott Her Majesty's Inspector