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



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Mrs J Prideaux Headteacher The Maplesden Noakes School Buckland Road Maidstone Kent ME16 0TJ

Dear Mrs Prideaux

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 14 and 15 September 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 11 lessons and short visits to four more.

The overall effectiveness of mathematics is satisfactory.

Achievement in mathematics

Achievement in mathematics is satisfactory.

- Students make satisfactory progress over their time at the school. Standards in mathematics are improving and students' results at GCSE are now consistent with their prior attainment. Nevertheless, attainment overall is well below the national average because the highest attaining students in Maidstone attend the local grammar schools.
- Students' learning and progress in the mathematics lessons observed were mainly satisfactory. In the best lessons, students responded well when challenged to think for themselves, showed positive attitudes and made good progress. More typically, the pace of learning was slower, partly because of the quality of the teaching, but also because of some students' difficulty in recalling mathematical facts and previously learnt techniques.

Students currently in Year 11 took GCSE at the end of Year 10. This early entry meant that some students felt underprepared. Their performance was creditable given that many had not been taught the full specification for the examination. The school has sensibly changed its curriculum policy so that all students in Year 11 now continue studying mathematics, giving them the chance to improve their GCSE grades.

Quality of teaching in mathematics

The quality of teaching in mathematics is satisfactory.

- In the more effective lessons, teachers gave students opportunities to apply their existing knowledge to work out things for themselves, often through discussion with each other. The teachers were careful to provide explanations that promoted understanding. Students then worked through a varied set of questions that helped them to develop a degree of fluency.
- More often, teachers demonstrated a mathematical technique, which students then applied to routine exercises from a textbook or worksheet. On occasion, the lack of any preamble meant that students were taught a method of solution before they had understood the question. This style of teaching helps to explain why students lack confidence in tackling problems that present minor variations from what they have been taught.
- In all lessons, teachers and teaching assistants were diligent in supporting individual students but teachers did not always check that all were working conscientiously and able to make progress. Notable variation in the quality and frequency of marking was evident in students' books from last year.

Quality of the curriculum in mathematics

The quality of the curriculum in mathematics is satisfactory.

- The department has satisfactory schemes of work, with different versions for different mathematics sets. However, as the school recognises, they provide little guidance on how key topics should be taught or what depth of coverage is expected. As a result, different classes may learn a topic in different ways and this hinders progress.
- The new Key Stage 4 schemes spread GCSE work across three years and have realistic timescales for topics to be covered in sufficient depth to prepare students well for their GCSE examinations. However, examination entry policies are not fully aligned with the revised curriculum.
- The Key Stage 3 schemes are pitched a little high, particularly for students with low prior attainment. There has been little recent liaison with primary schools to ensure a smooth progression for students. As a result, some Key Stage 3 topics have to be taught again in Key Stage 4.
- The schemes of work specify some investigative tasks that require students to use and apply the mathematics they have learnt. Further thought is needed to ensure that the tasks are sequenced to promote the progressive development of the relevant skills.

Effectiveness of leadership and management in mathematics

The effectiveness of leadership and management in mathematics is good.

- The school has demonstrated a good capacity to improve in mathematics. Staffing has been stabilised and subject leadership reinvigorated in recent years. The progress of individuals and groups of students is monitored carefully and intervention programmes have been developed to tackle underachievement. As a result, GCSE results improved in 2010 and 2011.
- While their initial focus was on maximising the pass rate at GCSE grade C, senior leaders have now made a bold commitment to improving mathematics provision throughout the school. The school is working successfully with an external consultant to develop richer and more engaging learning activities that promote conceptual development. The subject leader provides a good role model through her own style of teaching and her line manager provides focused support to other teachers.
- The subject leader is working hard to improve the department's work in various ways. She has had few opportunities to see good practice in other schools. While her teaching load is consistent with other subject leaders, it does not allow for the extra work needed to get the maximum benefit from the consultant. However, she has prioritised wisely.

Areas for improvement, which we discussed, include:

- raising attainment further by:
 - ensuring that the GCSE entry policy is aligned with the schemes of work so that students do not enter examinations under-prepared
 - giving more emphasis in teaching to developing students' understanding of the methods they are taught
 - revising the Key Stage 3 schemes to ensure smooth progression from Key Stage 2, aiming to develop greater fluency in fewer topics
- improving teaching by:
 - engaging all teachers in developing agreed approaches to key topics to improve students' understanding
 - increasing teachers' skills in gathering assessment information during lessons that can be used to guide future teaching
- maximising the head of department's impact by providing her with:
 - additional non-contact time to work with the external consultant
 - opportunities to visit well-led successful mathematics departments.

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