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Mrs Eunice Newton
Principal
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Dear Mrs Newton

Ofsted 2012–13 subject survey inspection programme: mathematics

Thank you for your hospitality and cooperation, and that of your staff and students, during my visit on 23 and 24 January 2013 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 eight lessons and short visits to a further seven.

The overall effectiveness of mathematics is good.

Achievement in mathematics

Achievement in mathematics is good.

- Attainment in the main school is high and rising. Since 2010, the proportion of students obtaining a grade C or above in GCSE mathematics has increased considerably and is very high. The proportion of students achieving grade A*/A passes has not risen as quickly but early entry results for the current Year 11 indicate a marked improvement.
- The achievement of sixth formers is variable. AS results were above average in 2012 and students made the progress expected, given their GCSE results. A-level achievement, however, was below average.
- The majority of students make good or better progress in lessons. Discussions are lively, mathematical language is used well, and students confidently put forward ideas and challenge each other's thinking. The

presentation of students' work is outstanding. Students are justifiably proud of their books, which contain clear evidence of good or better learning.

- Students are set aspirational targets that are well understood and very closely monitored. Students know how they are doing and can explain what they need to do to improve further.

Quality of teaching in mathematics

The quality of teaching in mathematics is good.

- The quality of teaching varies. The majority is good with examples of outstanding practice but teaching in a small number of lessons requires improvement.
- Lessons are planned well. Teachers use a variety of activities to build on earlier learning and extend thinking. They deploy a wide range of resources to engage students' interest and enhance understanding. Both innovative and traditional teaching approaches are used successfully.
- Teachers questioning skills are good. They ask probing questions that challenge students' thinking and use questioning very effectively to bring students into discussions and check their understanding. However, not all teachers make frequent enough checks on learning or create sufficient opportunities to consolidate key points.
- Relationships in lessons are very good. Humour is used well and students are comfortable sharing ideas, 'having a go' and admitting that they do not understand.
- The quality of marking is outstanding across the entire faculty.
- Where teaching is less effective, learning slows because students do not understand the concept and the pace is not picked up quickly enough.

Quality of the curriculum in mathematics

The quality of the curriculum in mathematics is outstanding.

- The curriculum is highly responsive. For example, modules offered in the sixth form are chosen to meet students' needs. GCSE statistics has been dropped in favour of a level two further mathematics qualification that is more beneficial to students.
- The curriculum is designed to raise the aspirations of students and parents. Key Stage 3 is completed in two years and students are introduced to GCSE questions from Year 7. They say it gives them a tremendous boost when they succeed. All students are entered for Foundation GCSE at the end of Year 9 with the exception of the most able mathematicians who are encouraged to enter at higher level. Results are good and students say this encourages them to try for higher grades at later sittings.
- Senior leaders ensure mathematics has a high profile across the academy. They mentor students preparing for GCSE. The Principal (a non-

mathematician) teaches a less able group with great success. Teachers and teaching assistants are encouraged to develop their own mathematical skills.

- A very wide range of approaches and resources enhances learning. Investigations, problem solving, mathematical games, practical work and information technology are all used very effectively. The academy is focusing on the development of students' independent learning skills. A member of the mathematics team is currently carrying out independent research to develop these skills in sixth form mathematics teaching and this is being put to effective use across the faculty.
- Very productive links with local universities ensure fresh ideas are brought into the department to revitalise the team. The team provides training for teachers in its partner primary school and, in return, gains valuable insight into how mathematical concepts have been developed.

Effectiveness of leadership in, and management of, mathematics

The effectiveness of leadership and management of mathematics are good.

- Senior leaders have high ambitions for the faculty and a very accurate grasp of its strengths and areas for development. Self-evaluation, sharp development plans and effective monitoring systems, in place across the academy, play a major role in driving improvement.
- The analysis of data and reports from awarding bodies is very thorough and leads to effective remedial actions.
- Initiatives to build capacity are effective. Middle leaders, mentored by an associate senior leader, are developing well. The extensive training is helping to improve the quality of teaching and support.

Areas for improvement, which we discussed, include:

- improving achievement in the sixth form
- ensuring that the quality of teaching is more consistent across the faculty.

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.

Yours sincerely

Jan Bennett
Her Majesty's Inspector