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Mr C Morris
Headteacher
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Dear Mr Morris

Ofsted 2014–15 subject survey inspection programme: mathematics

Thank you for your hospitality and cooperation, and that of your staff and students, during my visit on 10 and 11 March 2015 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 lessons.

The overall effectiveness of mathematics is outstanding.

Leadership and management of mathematics are outstanding.

- High levels of students' achievement have been maintained over a sustained period of time. Senior leaders recognise the importance of mathematics and have provided strong support through additional staffing and curricular time. Students say that the quality of mathematics teaching is highly regarded in the school.
- Self-evaluation is accurate and takes full account of the performance of groups and students' achievement over time. The improvement plan identifies appropriate areas of focus.
- Although guidance is not formalised, leaders have been successful in promoting consistent approaches to teaching that have a positive impact on students' learning over time.

- Leaders provide advice and support to leaders and/or teachers in several local schools, including those linked through the Teaching School Alliance centred at Broughton.

The curriculum in mathematics is good.

- The curriculum enables students to achieve very well. In 2014, all students gained a GCSE pass in mathematics at grades A* to G. Substantial, and increasing, numbers are choosing to study advanced-level mathematics in the sixth form.
- The recent policy of entering the more able students for GCSE statistics has led to exceptionally high results: for example, in each of the last two years, over 60% of those entered gained the highest A* and A grades. Leaders plan to revise the current policy of entering all students in Year 10 for GCSE statistics.
- The schemes of work are well organised and are supplemented by a set of indexed teaching materials. Together, they cover appropriate content, including reasoning and problem-solving. The school has suitable plans to strengthen the written guidance on problem-solving activities.
- Students benefit from opportunities to take part in mathematical activities outside of lessons, including mathematical challenge competitions. The school's new 'learning challenge' activity raises the profile of mathematics as a whole-school priority.
- Teachers provide a range of support activities, particularly for disadvantaged students and those in danger of falling behind their targets. Information provided by the school demonstrates that this support is having a positive impact on the students concerned.

Teaching in mathematics is outstanding.

- Teachers use their strong subject knowledge very effectively to plan work that addresses a progression of ideas. They know the common errors and misconceptions that might occur and adapt their teaching accordingly.
- Teachers have high expectations of students' work and behaviour and select activities that engage students very effectively. Teaching has an appropriate emphasis on developing students' fluency, including their conceptual understanding. Students of all abilities face challenging tasks.
- Teachers provide older students with increasing opportunities to tackle extended worded questions. This, together with teachers' strong emphasis on developing students' mathematical language, helps students to apply mathematical reasoning effectively to explain and justify steps in their working.
- Teachers assess students' progress in lessons very well. By using a combination of questioning, monitoring written work, and observing students' answers written on mini-whiteboards, they form a rapid and comprehensive assessment of students' learning. They use this information effectively to adapt their teaching or respond to individual difficulties.

Achievement in mathematics is outstanding.

- Attainment is well above average. For example, the unvalidated 2014 GCSE results show 84% of the cohort gaining grades A* to C, compared with a national average of 69%. The proportion of students gaining the highest A* and A grades is also high.
- Students' progress is outstanding. For all ability groups, the proportions making the expected progress at least match national figures; the same applies for the proportions exceeding expected progress. The most able students make outstanding progress. Progress measures for students who enter the school with attainment at Levels 4 and 5 are consistently high.
- Work in students' books and evidence from lesson observations confirm that current students achieve very well throughout the school. Similarly, the school's monitoring data suggest that high standards are being maintained.
- Disadvantaged students achieve well. In 2014, the attainment of this group was in line with that of non-disadvantaged students nationally and roughly a grade lower than other students in the school. The school has extensive strategies in place for supporting disadvantaged students and has had some success in narrowing the achievement gap.
- Students have very positive attitudes to mathematics. They behave extremely well and respond readily to the work they are set. They make very effective use of visual images to answer mathematical questions. They enjoy using mini-whiteboards to work informally before committing their answers to paper. They have strong communication skills and are beginning to tackle worded problems and questions in unfamiliar contexts with more confidence.

Areas for improvement, which we discussed, include:

- continuing to strengthen the written guidance on problem solving in the schemes of work.

I hope that these observations are useful as you continue to develop mathematics in the school.

As explained previously, 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