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Ms K Healey
Headteacher
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Dear Ms Healey

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 11 and 12 February 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; and observation of four lessons together with shorter visits to 10 other lessons.

The overall effectiveness of mathematics requires improvement.

Achievement in mathematics requires improvement.

- Attainment is below average. For example, in 2012, the proportion of students gaining a GCSE pass at grade C or above was 57%, compared with a national average of 70%. Few students gained the highest A* and A grades.
- The proportion of students making at least the expected three levels of progress is below average and the proportion making at least four levels of progress is low. The cohort of students who left in 2011 made inadequate progress. The school's data indicate that current students are making better progress than in the past and that the school is on track to sustain and build on recent improvements.

- There are no consistent patterns of different groups doing better or less well than other groups. The achievement of disabled students and those with special educational needs, like other groups, requires improvement.
- Students enjoy opportunities to try out their solutions on mini-whiteboards. When learning algebra, they learn to follow set routines effectively and apply techniques of trial and improvement well. They are less confident when the question involves setting up an algebraic expression or when it is presented in an unfamiliar form.
- Most students have positive attitudes but a small minority have a casual attitude to contributing in class and to presenting their work.

Teaching in mathematics requires improvement.

- Teachers make good use of information and communication technology to present and discuss work. They use a variety of techniques to assess learning effectively during lessons. They use correct subject-specific vocabulary but could do more to encourage students to use the words themselves. Most lessons show evidence of positive working relationships. Teachers are beginning to use sorting and matching activities that encourage discussion and help to keep students fully engaged.
- While some teaching has an appropriate focus on developing students' conceptual understanding, other teaching places too much emphasis on students learning techniques and methods.
- Not all the work in students' books shows a sufficient degree of sustained challenge. Some teaching concentrates too much on students answering routine questions, so that some never meet more demanding work.

The curriculum in mathematics requires improvement.

- Almost all students gain a GCSE grade of A* to G. In exceptional circumstances the school makes provision for students to follow an additional GCSE course in statistics.
- The schemes of work for Key Stages 3 and 4 cover all requirements. The Key Stage 3 scheme includes reference to regular opportunities for students to engage in extended problem-solving activities. Some topics include additional guidance such as possible group work or linked investigational activities and departmental staff are working on extending this guidance further.
- The school has a record of entering students early for GCSE mathematics, with repeated entries for some students. A smaller number of current Year 11 students have taken GCSE early than in the past. The policy of early entry is under review for the future.

Leadership and management of mathematics require improvement.

- The last inspection identified achievement in mathematics as an area for improvement and, in particular, highlighted the need to close the gap between the attainment and progress of students in mathematics with

other core subjects. This was achieved successfully for the proportion of GCSE grades A* to C in 2012, where figures for mathematics were similar to those for English. However, measures of progress remain uneven. For example, while the gap between the proportion making the expected progress in mathematics and English has narrowed slightly since the last inspection, the gap remains large and is still a key area for improvement for the school.

- Recent improvements are evident in some measures. For example, the proportion of students gaining GCSE A* to C grades and the proportion making the expected progress both rose in 2012, and were clearly above the figures for the two preceding years.
- Self-assessment is broadly accurate. Improvement planning has an appropriate focus on outcomes and is well structured so that it can be reviewed at regular intervals. Regular tracking of students' progress is enabling staff to organise focused support for small groups of students at risk of underachieving.
- The school's leaders have recognised the need for improvements in mathematics through developing teaching and learning further. They have commissioned external consultants to undertake a review and provide on-going support. They are aware that subject leaders need to provide additional input on what constitutes effective subject-specific pedagogy and to promote a greater consistency of teaching approaches.
- Leaders and managers monitor provision effectively through lesson observations and scrutiny of students' books. Records of lesson observations could give more emphasis to the impact of teaching on learning and whether the planning and learning are effective.

Areas for improvement, which we discussed, include:

- raising achievement further through:
 - ensuring that a greater proportion of teaching focuses on building students' conceptual understanding
 - encouraging teachers to use more consistent approaches
 - offering more challenge, appropriate to students' abilities
 - providing teachers with more guidance on developing their subject-specific pedagogy.

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

Paul Chambers
Her Majesty's Inspector