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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 25 and 26 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, including after-school lessons, and tutor time when mathematics was being taught.

The overall effectiveness of mathematics is good.

Leadership and management of mathematics are good.

- The faculty leader is an excellent role model for teaching and learning in mathematics. She has created a culture of high expectations, in staff and students, which overcomes some of the challenges teachers face in this school. These include the very high proportions of students who are new to English and/or join the school after Year 7.
- The faculty is staffed by experienced, enthusiastic and committed professionals, many of whom are passionate about their subject and raising their students' achievement. The faculty enjoys the active support of senior leaders, facilitating generous staffing and timetable flexibility.
- Through careful pairing of staff, teachers are encouraged to plan together on specific issues such as addressing the needs of students new to English or developing proportional reasoning. This gives opportunities for staff to learn from each other. Good practice is also shared through regular weekly meetings and training. However, staff do not have sufficient time to

observe each other teach and, therefore, the very best practice in the faculty is not shared systematically.

- Work sampling is undertaken regularly and has recently been enhanced by adding student interviews. However, the evaluation of this, as well as of formal lesson observations, is generic rather than mathematics focussed. This means leaders do not know which aspects of mathematics are taught well, and by whom, and which need to be improved further.
- A testament to the work of the faculty is students' appreciation of what their teachers do for them; they want even more mathematics lessons.

The curriculum in mathematics is good.

- Many teachers in the faculty are skilled at identifying how topics link together to promote students' mathematical understanding and constantly reinforce terminology. Personalised mathematics dictionaries and reflective journals are a very useful way for students to assess their progress but are not used consistently across the faculty.
- The curriculum is enhanced by a range of intervention lessons. Regular study support after school, the mathematics surgery, holiday sessions and a breakfast club for the most able are just some of the activities of which students are highly appreciative.
- Students enjoy the annual mathematics fun week which includes quizzes, external speakers, team challenges and a visit, with the humanities faculty, to Bletchley Park to consider the mathematics of code breaking. Students are very enthusiastic about this kind of mathematics.
- Key Stage 4 schemes of work exemplify clearly the kind of questions students should be able to tackle and are enhanced by a range of high-quality resources designed by faculty members. Plans are in place to review these schemes of work in light of the new curriculum. Key stage 3 schemes of work have been rewritten but do not articulate sufficiently what students will have done in Key Stage 2 and do not yet include links to other topics. Consequently, students are not clear about the key concepts in mathematics and how topics interlink.

Teaching in mathematics is good.

- Teaching is good with some that is outstanding. Lessons, including mathematics sessions during tutor time and after school, are well planned. Teachers' good questioning skills, aimed at a range of students, help to keep learning moving. The best examples saw teachers' excellent subject knowledge being used to push students to understand complex ideas.
- Regular assessment throughout the faculty and half-termly question-level analysis in Key Stage 4 ensures students know what they are good at and what they need more practice in. In some classes, this information is collated, setting a clear agenda for what teachers need to teach next. This approach would benefit from being used systematically across the faculty.
- Teachers are remarkably adept at coping with the high turbulence in the student population. Teachers are consistent in creating a positive

environment for learning, with students persevering at questions they may find difficult and supporting each other. Students' behaviour is excellent.

- The focus on literacy in lessons is strong for students who are new to English, but the use of practical resources is not consistently well developed. While this can sometimes limit these students from making more rapid progress, the inclusive classroom environment means they are confident to try out new vocabulary and take part in discussions.
- Low-attaining students are particularly impressive in their desire to engage with difficult mathematics because of skilful teaching they experience routinely supplemented by support provided by teaching assistants.
- Teachers do not always insist on good mathematical presentation and do not consistently promote the development of mental calculations.

Achievement in mathematics is good.

- Students join the school with standards significantly below the national average. Standards in mathematics, have improved rapidly. In 2014, GCSE results in mathematics were the best ever, exceeding targets substantially: 62% of the students achieved a grade A*-C.
- The achievement of low-attaining students is outstanding. They benefit from small class sizes and very good teaching. Leaders are adamant that their best teachers are distributed equally across teaching groups.
- Disadvantaged students achieved well above disadvantaged students nationally and the gap with other students is closing quickly. With rising attainment for all students, the in-school gap between students eligible for free school meals and those not eligible has closed substantially.
- The most-able students did not make as much progress in 2014 as other groups in the school. The faculty reviewed its curriculum offer and renewed its focus on this group. In lessons, these students are set challenging work, and asked questions to promote higher level thinking.

Areas for improvement, which we discussed, include:

- developing the curriculum so it takes into account prior learning, including in Key Stage 2, makes links to other topics, and makes the big ideas in mathematics explicit to students
- being more systematic in sharing and embedding the excellent practice that exists in the faculty, both in the use of resources and through observing each other teach.

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

Asyia Kazmi

Her Majesty's Inspector