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Mr S Cook
Headteacher
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Dear Mr Cook

Ofsted 2012–13 subject survey inspection programme: science

Thank you for your hospitality and cooperation, and that of your staff and students, during my visit on 30 April and 1 May 2012 to look at work in science.

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 eight lessons.

The overall effectiveness of science is satisfactory.

Achievement in science

Achievement in science is satisfactory.

- In 2010, the percentage of Year 11 students attaining two or more A* to C grades in science was well below the national average. However, this percentage rose considerably in 2011 and is due to rise again this summer. Students' attainment in science is now average and the progress they make between Year 7 and Year 11 is satisfactory and improving.
- The achievement of boys is below that of girls and the achievement of higher-attaining students is below that of their peers nationally. However, the department is taking effective action to reduce these gaps.
- In the past, some students started AS-level science courses in the sixth form that were not appropriate to their needs and abilities, and as a result did not achieve well. The school has addressed this issue by providing

better advice and guidance to students when choosing courses. As a result, students are now making satisfactory progress on sixth form science courses, although their attainment remains below the national average.

- Students speak positively about their science lessons and appreciate the support given to them by their teachers. They enjoy science and behave well in lessons.

Quality of teaching in science

The quality of teaching in science is satisfactory.

- All the lessons observed during this inspection were at least satisfactory. However, not enough good teaching is provided to ensure that students make good progress over their time at the school.
- Consistent use of a common planning format and lesson structure is having a positive impact on the quality of teaching across the department. Teachers plan lessons that interest and engage students and actively involve them learning.
- Teachers have good subject knowledge and provide students with clear explanations that aid their learning.
- Most lessons proceed at a good pace and teachers make effective use of targeted questions to check and develop students' knowledge and understanding. However, this is not consistently the case.
- In the better lessons, teachers make effective use of data on students' prior learning to plan lessons that are well matched to their learning needs. However, in some lessons, tasks set for the whole class are either too difficult or not challenging enough for individual students.
- Students know their targets and how well they are doing. Books are marked regularly, although the quality of advice given to students about what to do to improve varies across the department.

Quality of the curriculum in science

The quality of the curriculum in science is good.

- The curriculum has a good focus on develop students' skills of scientific enquiry; the impact of this work is seen in improving GCSE coursework scores.
- A good range of both academic and vocational science courses is available to students in both Key Stage 4 and the sixth form.
- Students' use of information and communication technology, particularly data loggers, to aid their learning in science is underdeveloped.
- The school has recently, and sensibly, increased the time available for science in Key Stage 4 and this is beginning to have a positive impact on students' progress.

- The curriculum is well enhanced by a good range of science-related trips, visits and clubs.

Effectiveness of leadership and management in science

The effectiveness of leadership and management in science is good.

- The new head of department has effectively raised the expectations of both students and staff. Targets are challenging and the systems to track the progress of students have been improved. Underachieving students are now quickly identified and provided with appropriate support. This is having a positive impact on students' achievement.
- Teaching in science is being monitored well and the science leader has a good knowledge of the quality of teaching across the department. Some effective professional development activities are beginning to have a positive impact on the quality of teaching.
- Self-evaluation is accurate and honest and good plans are in place to improve students' achievement.
- Teaching programmes and resources are well organised and managed.

Areas for improvement, which we discussed, include:

- improving teaching to further raise attainment by the end of Key Stage 4 and the sixth form by ensuring that:
 - all lessons proceed at a good pace and tasks and activities are well matched to students' learning needs
 - all teachers make effective use of targeted questioning to check and develop students' learning
 - more opportunities are provided for students to use information and communication technology to aid their learning
 - written feedback gives students consistently clear and helpful feedback about how to improve.

I hope that these observations are useful as you continue to develop science 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

Peter Sanderson
Her Majesty's Inspector