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Mr A Williams  
Headteacher  
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Dear Mr Williams

### **Ofsted 2010–11 subject survey inspection programme: science**

Thank you for your hospitality and cooperation, and that of the staff and students, during my visit on 9 and 10 February 2011 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 nine lessons.

The overall effectiveness of science is outstanding.

### **Achievement in Science**

Achievement in science is outstanding.

- Students' attainment on entry to the school is similar to the national average. By the end of Year 11, students' attainment in examinations is well above the national average, and has been so for a number of years.
- The progress made by students in developing both their knowledge and understanding of scientific concepts and their skills of scientific enquiry is outstanding. All groups of students make broadly similar progress.
- Students are keen to answer questions and show confidence in tackling the work. Their behaviour is outstanding and they show strong relationships with each other and with teachers.
- Students work well individually and in a range of groupings. They show responsibility and consideration for others and for the environment as demonstrated by their involvement in the school's 'Eco' club.

- Students' enjoyment of science is evident in the increasing number choosing to study three sciences to GCSE level and at least one science post-16.

### **Quality of teaching in science**

The quality of teaching in science is good.

- The quality of teaching seen ranged from satisfactory to outstanding. The vast majority of teaching in the department is good.
- Teachers are energetic and enthusiastic about the teaching of science.
- Teachers have very good subject knowledge and this is used well to plan lessons around contexts that are interesting for students.
- Learning objectives are routinely shared with students at the start of lessons in order to focus their learning and returned to at the end of the lesson to evaluate students' progress.
- In the best lessons, tasks set for students actively involve them in learning and are pitched at the right level for all. The teacher skilfully uses questioning to track the progress made by students and alters the pace of the lesson to ensure that students make outstanding progress.
- In a small minority of lessons, teachers talk for too long and do too much work for students. At times, all students are set the same task, so work is not carefully matched to the learning needs of different groups of students.
- In nearly all cases, books are marked regularly and helpful advice is given to students about how to improve their work. However, this good and better practice is not consistent across the whole department.

### **Quality of the curriculum in science**

The quality of the curriculum in science is outstanding.

- Links with feeder primary schools are very strong and have a positive impact on students' achievement and enjoyment of science before they join the school.
- Opportunities for students to develop their skills of scientific enquiry are well integrated into schemes of work.
- A range of academic and vocational examination courses is available to students that meets their needs and aspirations extremely well. There is a good opportunity for higher attaining students to follow an accelerated route through Key Stage 3, starting GCSE courses in Year 9.
- The science curriculum is enriched through a very broad range of science-related clubs and activities. The school also makes good connections with other organisations and providers to plan rich educational experiences for students and the local community.

## **Effectiveness of leadership and management in science**

Leadership and management in science are good.

- The science curriculum leader has established a strong team, in which all staff are clear about their roles and responsibilities. Management and organisation are systematic and robust ensuring that the department runs smoothly on a day-to-day basis.
- Teaching quality is regularly monitored and joint observations undertaken during this inspection confirmed the accuracy of senior leaders' judgements.
- The science curriculum leader has a clear and accurate picture of the strengths and areas in need of development in science and these are succinctly captured in an annual self-evaluation form.
- Targets are challenging, reflecting the high expectations of the department. An excellent system is in place to monitor the progress made by students towards these targets and underachievers are quickly identified. The range of interventions in place to assist these students, plus extra revision classes and coursework support are having a very positive impact on students' progress.
- During this visit it was evident that the science experience of some classes has been adversely affected by the long-term illness of two members of staff. Although adequate arrangements are in place for the teaching of these classes, leaders have not ensured sufficiently that work is regularly marked and that appropriate homework is set for these groups.

### **Areas for improvement, which we discussed, include:**

- increasing the percentage of lessons that are outstanding by ensuring that in all lessons:
  - students are actively involved in learning through a range of tasks that are pitched at the right level for them
  - questioning is used skilfully by teachers to check students' rate of learning and to inform adjustments to the pace of the lesson.

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

As I 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. Except in the case of academies, a copy of this letter is also being sent to your local authority.

Yours sincerely

**Peter Sanderson**  
**Her Majesty's Inspector**