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Mr T Royle  
Headteacher  
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Dear Mr Royle

### **Ofsted 2011–12 subject survey inspection programme: science**

Thank you for your hospitality and cooperation, and that of the staff and students, during my visit on 20 and 21 June 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 eight lessons.

The overall effectiveness of science is good.

#### **Achievement in science**

Achievement in science is good.

- After a dip in the percentage of Year 11 students attaining two or more A\* to C GCSE grades in science in 2010, evidence indicates that attainment against this measure will rise to above the national average again in 2011.
- Students make good progress in their development of scientific knowledge and understanding and in their development of the skills of scientific enquiry between Years 7 and 11.
- The percentage of students attaining the higher GCSE A\* and A grades in science is below the national average, but improving.
- The progress of students on science courses in the sixth form is satisfactory and improving. Progress is better in Year 13 than in Year 12.
- A higher than average number of Year 12 students did not achieve a pass grade in the AS-level science that they were following in 2010. This was in

part due to some students being recruited to courses that did not appropriately meet their learning needs and abilities. The school is improving the advice given to students and this is beginning to address this issue.

- Students enjoy science as evident in the increasing number choosing to follow science courses in the sixth form.
- The vast majority of students behave well in lessons, are keen to do well and work safely and sensibly when completing practical work.

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

The quality of teaching in science is good.

- Teachers have very good subject knowledge and they use this well to plan interesting lessons for students that actively involve them in learning.
- Teachers make effective use of questioning to check and develop students' learning. In the best lessons, teachers alter their teaching as a result of this assessment.
- Teachers make effective use of digital presentations to aid learning.
- Lessons are characterised by good relationships between staff and students. Older students are very appreciative of the additional time given to them outside of lessons for revision and examination preparation.
- Some teachers are making effective use of prior attainment data to plan lessons that provide a suitable level of challenge for all students in their class. However, this good practice is not consistent across the department with some lessons lacking challenge for higher attaining students.
- Across the department, the quality of written advice being given to students about how to improve their work varies.

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

The quality of the curriculum in science is good.

- The Key Stage 3 curriculum is being developed well with an increasingly effective focus on the development of students' skills of scientific enquiry.
- A good range of academic and vocational courses is meeting students' needs and interests well in Years 10 and 11. The school is sensibly extending the sixth form curriculum in September 2011 by offering an A-level equivalent vocational course to students.
- The curriculum is well organised and planned to ensure that there is good progression in students' learning.
- Science clubs, an environment club and a range of trips and visits are enhancing students' enjoyment of science.
- The use of data-logging as a tool to support students' learning is underdeveloped.

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

The effectiveness of leadership and management in science is good.

- Robust action of senior leaders has improved the quality of leadership and management during the past year.
- The new head of department has a clear vision for the development of science, based around developing students' skills of scientific enquiry. This vision has been effectively shared with, and embraced by the department.
- The departments' high expectations are reflected in the challenging targets set for students.
- The quality of teaching is being monitored well and effective professional support for teachers is having a positive impact on their practice.
- The monitoring of marking is becoming more robust and is beginning to lead to better consistency in the quality of advice being given to students.
- Effective action has been taken within the last year to improve the specialist science accommodation in the school.
- The science development plan accurately identifies and addresses areas in need of improvement. However, the success criteria within this plan are not sufficiently specific and measurable; systems of monitoring and evaluation are unclear.

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

- ensuring that all teachers make effective use of students' prior attainment data to plan and deliver lessons that provide a suitable level of challenge for all students, particularly the more able
- ensuring that all marking gives clear and helpful advice to students about how to improve
- ensuring that Year 12 students are recruited to appropriate science courses.

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**