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Mrs B Jackson  
Headteacher  
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Dear Mrs Jackson

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

Thank you for your hospitality and cooperation, and that of your staff and students, during my visit on 11 and 12 January 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 good.

#### **Achievement in science**

Achievement in science is good.

- Students make good progress and achieve well from their broadly average starting points. The proportion of students gaining at least two A\* to C grades at GCSE has been significantly above average for the last three years.
- In 2011, almost three quarters of the cohort gained three separate GCSE science qualifications; most of these students attained A\* to C grades in all three subjects.
- Students' enjoyment of, and success in, science is reflected in both the number of students choosing to continue their science studies post-16 and the subsequent progression of the large majority of these students to science-related degree courses.

- In lessons, most students show good attitudes to learning and a willingness to engage in activities. Most work well collaboratively and demonstrate secure independent learning skills.
- Students' have a secure knowledge of their targets and understanding of how to improve their learning in Key Stage 4 and 5. These aspects are less well developed in Years 7 and 8.

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

The quality of teaching in science is good.

- Teachers' very strong subject knowledge and enthusiasm for science successfully promote students' achievement and enjoyment.
- Lessons typically build effectively on students' prior learning and incorporate a range of activities and approaches that is well matched to students' needs.
- Students highlight the quality of teachers' explanations; the variety of activities in lessons; and, the use of practical work to develop their understanding as strengths of the teaching in the department.
- Teachers use questioning effectively to check students' understanding and extend their thinking.
- The use of a wider range of assessment strategies to monitor learning during lessons, along with good quality marking and helpful written feedback to students, is not consistently embedded across the department.
- Relationships in the classroom are positive and students, particularly in Key Stages 4 and 5, appreciate the high levels of support provided by staff.
- Teachers make effective use of a range of information and communication technology (ICT) applications to support learning in the classroom.
- Opportunities for students to use ICT to support their learning in science are developing with the availability of extensive facilities in the school's new science, technology, engineering and mathematics (STEM) centre.

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

The quality of the curriculum in science is satisfactory.

- Collaborative planning with a strong focus on setting learning in interesting contexts, and the effective deployment of specialist subject teachers, ensures that the curriculum at Key Stages 4 and 5 engages most students well.
- The flexible use of a three-year Key Stage 4 to complete either a double or triple award course contributes to students' good achievement in science.
- Small numbers of students benefit from a range of trips and visits to enrich the curriculum, but some, particularly at Key Stage 4, feel this aspect of the provision could be enhanced further.

- The STEM club is popular with students in Years 7 and 8, and cross-curricular themed learning weeks in Year 8 provide good opportunities for students to pursue open-ended investigations.
- Good links with local universities support curriculum delivery in the sixth form.

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

The effectiveness of leadership and management in science is good.

- Leaders in the department have ensured that teachers have high expectations of students and that all staff share a strong commitment to securing their good achievement.
- Students' progress is carefully monitored and effective actions are taken to address identified underperformance.
- External professional development opportunities have been used well to enhance leadership skills, develop provision and deepen subject expertise within the department.
- There is a secure view of the quality of teaching and learning across the department but lesson evaluation does not always focus sharply enough on the impact of teaching on students' progress.

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

- extending good practice in relation to curriculum contextualisation into Years 7 and 8
- ensuring that students know what to do to improve their work, especially at Key Stage 3
- increasing the effectiveness with which learning is monitored in lessons
- developing curriculum enrichment opportunities further, particularly at Key Stage 4.

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

**Katrina Gueli**  
**Her Majesty's Inspector**