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Mrs S Page  
Headteacher  
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Dear Mrs Page

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

Thank you for your hospitality and cooperation, and that of your staff, during my visit on 23 November 2010 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 leaders; scrutiny of relevant documentation; analysis of students' work; and observation of five lessons.

The overall effectiveness of science is satisfactory.

### **Achievement and standards**

Achievement in science is satisfactory.

- Over the last three years pupils' attainment by the end of Key Stage 2 in science has fluctuated significantly and pupils' progress relative to their broadly average starting points is satisfactory overall.
- Pupils generally behave well and show good levels of engagement when carrying out practical activities or discussing their ideas with a partner. They are able to organise themselves effectively to ensure all group members are involved in carrying out investigations and that their observations or measurements are accurate.
- In lessons, pupils have a secure understanding of how to conduct a fair test. However, opportunities to interpret evidence to identify patterns and

draw conclusions or identify how an investigation could be improved are less frequent and consequently, pupils are less confident in these respects.

### **Quality of teaching and learning of subject**

The quality of teaching of science is satisfactory.

- Teachers' subject knowledge is secure and this has increased their confidence to provide more frequent scientific enquiry experiences in lessons. The subject leaders' good specialist knowledge has been effective in supporting colleagues' development.
- Teachers typically plan a variety of activities including many hands-on opportunities for pupils to extend their knowledge and understanding of science. However, in a minority of cases, planned activities do not always support the intended learning well and, consequently, pupils' progress is satisfactory rather than good.
- In a few lessons seen, learning was slower because teachers were not making clear links between the context and the science knowledge and understanding or they had not anticipated potential experimental pitfalls.
- Teachers are effective in eliciting pupils' prior knowledge and checking their understanding through the use of careful questioning. Pupils are frequently asked to signal if they have understood a particular idea or instruction and this helps teachers to identify where teaching needs to be adjusted.
- The quality of marking and written feedback to pupils varies across the school particularly in providing clear guidance on what they need to do to improve.
- Teachers assess pupils' progress and provide a national curriculum level for science as a subject. However, as yet, there is no system to identify science specific targets to support progression for example, from Year 3 into Year 4.
- There are some effective examples of teachers' use of new technologies to support learning including pupils' use of data-logging during investigations and the helpful electronic resources prepared to support teachers' planning.

### **Quality of the curriculum**

The quality of the curriculum is good.

- Teachers plan collaboratively facilitating the sharing of effective practice and make useful links between science and current topics in other subjects to make the learning relevant.
- Teachers consider carefully how the curriculum can be adapted for pupils with special educational needs and/or disabilities and this ensures these pupils have a broad and balanced science learning experience alongside their peers.

- There is a good range of enrichment activities including educational visits and themed weeks that are used well to promote pupils' understanding and enjoyment of science. Extra-curricular opportunities such as the 'Eco-club' make a good contribution to pupils' knowledge of the environment and the importance of sustainability.

### **Leadership and management of the subject**

Leadership and management of science are satisfactory.

- The subject leader has secure knowledge of the strengths and weaknesses of provision in science based on the findings of a range of monitoring activities. However, overall the evaluation of the quality of teaching and outcomes for pupils in science is overgenerous.
- The findings of evaluation inform the annual subject development plan and successful actions have been taken to increase the challenge for higher attaining pupils and develop staff confidence in the teaching of scientific enquiry and their subject knowledge.
- A system to monitor pupils' attainment year-to-year is in place and includes the analysis of outcomes for different identifiable groups. However, the current system of assessment does not easily allow small steps in pupils' progress to be recognised or underperformance to be identified and tackled.

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

- ensuring all activities in lessons support the intended learning well
- developing written feedback to pupils by providing clear guidance for pupils on how to improve
- refining systems to monitor pupils' progress and use the findings of assessment to set targets that will enhance pupils' progression across the school
- sharpening the evaluation of the impact of teaching on pupils' progress.

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

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