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Mr J Ayton  
Headteacher  
Walgrave Primary School  
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Dear Mr Ayton

### **Ofsted 2012–13 subject survey inspection programme: science**

Thank you for your hospitality and cooperation, and that of your staff and pupils, during my visit on 16 January 2013 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 pupils; scrutiny of relevant documentation; analysis of pupils work; and observation of three lessons.

The overall effectiveness of science is good.

#### **Achievement in science**

Achievement in science is good.

- School assessment information shows pupils attain above average standards in science and make better than expected progress in all classes. Disabled pupils and those who have special educational needs achieve well, because teachers and support staff adjust the science activities to match these pupils' needs.
- Pupils are well trained, from an early age, to take a high level of responsibility for their work. This allows teachers to set interesting, open-ended scientific investigations knowing that pupils will tackle the experiments sensibly and carefully.
- Almost all the science learning is delivered through practical work, which is ensuring pupils develop above average scientific enquiry skills.

- The pupils reading and writing about science is generally limited to finding out more about the experiment they are doing, and then reporting their results. There is scope for wider reading and research around science topics, to enhance the literacy and communication development of pupils.

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

The quality of teaching in science is good.

- Teachers consistently plan science lessons that are quite challenging and open-ended, and give time for pupils to explore and investigate scientific ideas for themselves. This approach generates great interest from pupils, but can sometimes make it difficult for pupils to recognise the key scientific ideas underneath the experiment.
- However, a real strength of teaching is the reflective evaluation of pupil learning in science lessons. As a result, teachers effectively adjust the plans for subsequent lessons to ensure pupils grasp the key ideas.
- Work scrutiny reveals consistently good science subject knowledge across the school, and in the lessons seen, teachers are skilled at asking questions that help extend understanding.
- Teachers thoroughly mark science work, with written praise and suggestions for further improvement, noted as 'targets'. Pupils know they ought to respond to these although are not always doing so.

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

The quality of the curriculum in science is good.

- The focus on interesting and challenging open-ended scientific enquiry, from an early age, is ensuring pupils are learning to work scientifically very well, and this underpins their good progress in science.
- Information and communication technology is in widespread and effective use, by all ages of pupils. Pupils use tablets to photograph experiments, record and analyse results, research information and create presentations for their peers. They can also respond to whole-class questions electronically, giving teachers instant information on how well each pupil is learning.
- Science lessons contribute to larger cross-curricular topics. Topic themes are planned collaboratively, and then individual teachers set up the details. However the amount of science work per topic varies. This can result in long gaps, of several weeks, between science lessons. Over time, the curriculum is being covered adequately. There is scope to consider enhancing the time assigned to science within those topics that currently have minimal content.
- The school has a 'Forest School' resource that is an effective way to develop environmental science. All pupils benefit scientifically and socially by learning outdoors, and have developed an empathy with and understanding of the local habitat as a result.

- There are a number of local and national trips that include a science theme, which help to enhance and enrich pupils' experience of science.

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

The effectiveness of leadership in, and management of, science is good.

- Senior leaders collect science assessment data against all four assessment targets once a term, and use this to track pupil progress alongside English and mathematics. This is ensuring consistently good progress in every year group. The easily available data allows teachers to respond quickly to any shortfalls in the learning of their pupils.
- There has been no science specific professional development recently, and a lack of capacity in the local authority has seen the end of centrally led subject coordinator briefings.
- The school has engaged with various curriculum projects that involve science, for example a science arts and writing project in 2010, and a 'problem solving' training day for science and mathematics, working with primary schools nearby.
- Teachers review their science work annually and report this to senior leaders, although these are not then pulled together to make a whole school science improvement plan.

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

- widening the opportunities for pupils to read and write about science in the wider world, such as in current affairs
- maintaining a regular science teaching input in every topic to maintain and reinforce pupils' skills and understanding.

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

**Brian Cartwright**  
**Her Majesty's Inspector**