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Mrs S Wride  
Headteacher  
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Dear Mrs Wride

### **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 7 November 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, governors and pupils; scrutiny of relevant documentation; analysis of pupils' work; and observation of three lessons.

The overall effectiveness of science is outstanding.

#### **Achievement in science**

Achievement in science is outstanding.

- Pupils all make two levels of progress and the majority three, from above average Key Stage 1 starting points. This is much higher than national proportions and shows outstanding progress.
- Pupils have exceptionally well-developed skills of scientific enquiry. This is because lessons consistently include high quality practical activities. Pupils enjoy these investigations, and take considerable responsibility for planning, carrying out and reporting their work from an early age.
- Pupils also attain high academic standards of science subject knowledge. This is evident in high quality written work in their books, project reports, displays and posters, and from teacher assessment of their knowledge.
- Visits, trips and visitors feature regularly in pupils' written work, further deepening pupils' knowledge of science.

## **Quality of teaching in science**

The quality of teaching in science is outstanding.

- There is a consistent and very detailed approach to teaching investigative science which underpins the excellent learning achieved by pupils. This is effectively developing the school's strategic aim of teaching pupils how to think, and how to be responsible.
- Teachers routinely relate science to other subject work the pupils are studying. This helps give the science a context that pupils recognise and enjoy. As a result pupils are learning how science contributes to their own lives and the world around them.
- Teachers have good subject knowledge, which underpins their confidence in giving pupils considerable freedom to design and carry experiments. Teachers maintain a careful watch on the progress of each pupil. This allows for quick and unobtrusive support for pupils, from teachers and skilled teaching assistants.
- Very occasionally teachers take too long in establishing the main task. This means that pupils who are ready to begin have to wait until the teacher is completely convinced the entire class knows what to do.

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

The quality of the curriculum in science is outstanding.

- The lesson time allocated to investigative science is high, leading to very well developed scientific enquiry skills for pupils. Pupils also cover a great deal of subject knowledge in lessons, at a challenging level of academic demand.
- The very good programme of external trips and visits for pupils make a strong contribution to the science curriculum. Local visitors including parents and governors share their own professional interests with pupils. Pupils are therefore particularly well-informed about possible future careers in science, technology and engineering.
- The school plans very effective, consistently reinforced, connections between science and mathematics that enhances both subjects. This provides opportunities for pupils from different aged classes to work together. Science is giving a real context for teaching mathematics.
- Literacy links are developing in science, although the school plans to extend these further. There is scope for pupils to do more extended writing about science. Design and technology projects link closely to science, for example with the electrically powered 'Roman chariots'. Pupils create substantial high quality portfolios about these projects that they share with the whole class.

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

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

- The subject leader is also the school's headteacher. She models very high expectations of what pupils are capable of achieving, and her own secondary science background ensures high academic demand.
- A strong feature of leadership is the very detailed tracking of pupil attainment in the subject knowledge strands. This information guides any necessary intervention and support, and ensures no pupil is underachieving.
- School leaders continually evaluate the effectiveness of assessing the scientific enquiry skills of pupils. As a result, they have switched to using the 'assessing pupils progress' (APP) approach, from a previously less successful pupil self-assessment model. The evidence from assessment is carefully applied, with reliable data guiding the planning of lesson practical work to reinforce learning and deal with any gaps.
- Continuing professional development for science teachers is led by the headteacher. There is an effective local cluster of primary schools who work in collaboration on common areas for development.

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

- Continuing the further enhancement of literacy through writing about science.

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**