Aviation House 125 Kingsway London WC2B 6SE

T 0300 123 1231 F 020 7421 6855 enquiries@ofsted.gov.uk www.ofsted.gov.uk



24 January 2011

Mr D Payne Headteacher Biggin Hill Primary School Old Tye Avenue Biggin Hill Westerham TN16 3LY

Dear Mr Payne

Ofsted 2010-11 subject survey inspection programme: science

Thank you for your hospitality and cooperation, and that of the staff and students, during my visit on 13 January 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 pupils; scrutiny of relevant documentation; analysis of pupils' work; and observation of six lessons or parts of lessons.

The overall effectiveness of science is good.

Achievement in science

Achievement in science is good.

- At the end of Year 6 in 2010 pupils' attainment was above both local and national averages. The school's analysis of information on performance shows that slightly fewer pupils reached the higher Level 5 than in the previous year.
- In Year 2, although the attainment was above average overall, the number of pupils reaching the higher Level 3 was below the local average.
- From when they enter the school, children make very good progress in the Early Years Foundation Stage and their development in the 'knowledge and understanding of the world' area of learning is rising strongly.
- Pupils make good and, in some cases, very good progress. In lessons where expectations are high and activities engaging and demanding, progress is rapid.

■ In lessons, pupils behave well and have good attitudes towards their learning. When given the opportunity, they are keen to participate and work well both independently and in groups. They enjoy making their own decisions and raising questions as well as being actively involved in planning investigations.

Quality of teaching in science

The quality of teaching in science is good.

- Teachers plan to make their lessons relevant to pupils' lives and interests and linked to appropriate learning objectives. However, these objectives are not always related clearly to assessment opportunities.
- Teachers are careful to challenge and investigate misconceptions. They are skilled in using questioning in lessons to explore and develop pupils' understanding of scientific ideas as well as their developing vocabulary.
- Imaginative and relevant activities in lessons capture pupils' interest and stimulate their curiosity. Pupils are increasingly adept at using information and communication technology and understand the advantages of using items, such as light meters, in practical work. They use digital cameras regularly to record their work.
- Marking of pupils' work recognises success and gives guidance on how to improve. However, it does not always give enough information to pupils about the standard of their work.

Quality of the curriculum in science

The quality of the curriculum in science is good.

- The curriculum has a clear emphasis on developing pupils' sense of enquiry and curiosity in the world around them.
- The school is in the process of developing a creative approach to the curriculum. A thematic approach is being trialled carefully to extend and enhance skill development while allowing for the different aspects of learning to be clearly connected.
- This planning is giving appropriate priority to science practical work that helps engage pupils with science including investigative activities that give them opportunities to make their own key decisions and test out their scientific knowledge and understanding.
- The good Early Years Foundation Stage curriculum is developed around focused teaching and independent activities that allow pupils to explore and find out.

Effectiveness of leadership and management in science

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

- The school's effective monitoring systems give a clear view of the strengths and areas for development in science. For example, recent monitoring identified good marking strategies but highlighted some issues in lessons regarding challenge for more able pupils in Key Stage 2.
- The senior team is working hard to raise the profile of science and understands the importance of developing teachers' skills and expertise in this area although only limited subject-specific professional development opportunities are available.

Areas for improvement, which we discussed, include:

- raising the attainment of more able pupils
- effective identification of assessment opportunities linked more closely to learning intentions.

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

Christine Jones Her Majesty's Inspector