

Aviation House
125 Kingsway
London
WC2B 6SE

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



16 July 2012

Mr K Archer
Headteacher
Burrough Green CofE Primary School
Bradley Road
Newmarket
Suffolk
CB8 9NH

Dear Mr Archer

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 12 July 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 pupils; scrutiny of relevant documentation; analysis of pupils' work; and observation of four lessons.

The overall effectiveness of science is good.

Achievement in science

Achievement in science is good.

- Pupils make good progress in science across all four classes, with no significant differences in achievement between different groups of pupils. The school assesses both their science enquiry skills and subject knowledge, with records that show pupils are making at least the expected two levels of progress, and often more than this.
- Pupils confidently talk and write about their learning in science, and enjoy practical investigations, which they conduct carefully. For example, pupils in Class 1 were studying seeds, gently sorting a range of different seeds according to their appearance, and also finding seeds in plants in the outdoor play area. Their concentration and willingness to persevere confirms their good attitudes to science from an early age, which continue throughout the school.

- Written feedback by teachers has improved substantially in recent months, so that pupils are receiving some advice on what to do to further improve. Sometimes that advice does not require an immediate response or action.
- Pupils very much enjoy taking part in deciding aspects of what they would like to find out about in the regular cross-curricular topic projects, but do not yet do this in routine science lessons.

Quality of teaching in science

The quality of teaching in science is good.

- Teachers' subject knowledge is good, with a collegiate approach to sharing ideas that is supportive and developmental. As a result, teachers are willing to try out new ideas. They are reflective professionals wanting to further improve their skills in delivering science investigations.
- In practice, teachers adjust the tasks to meet the learning needs of individual pupils, with direct questions and additional support. The written lesson plans do not always explicitly detail what outcomes teachers are expecting for particular pupils.
- Good learning consistently takes place as pupils engage with the practical activity, and sense the challenge of demanding yet interesting investigations. Once they can contribute to shaping the experiment, or researching the topic, learning accelerates; then pupils enthusiastically talk to each other, and their teachers and support staff about their work.
- Sometimes, teachers spend too long in trying to explain and construct the experimental plan, so pupils have less scope to find out how to do the investigation for themselves.

Quality of the curriculum in science

The quality of the curriculum in science is satisfactory.

- The schemes of work cover the required national curriculum adequately as far as subject content is concerned. However, pupils do not yet have sufficient opportunities to plan and carry out investigations for themselves. The frequency of practical work appears to be about once in every three weeks, with the other two weeks taken up with teacher-led planning sessions, or extended reporting tasks.
- The school uses its open and innovatively designed school building very well to display pupils' work, particularly their projects such as bridges and models of the recent Jubilee Pageant, both of which include elements of science work.
- The range of extra-curricular activities is good, with effective links to science and engineering professionals that enrich the topic work well.

Effectiveness of leadership and management in science

The effectiveness of leadership and management in science is good.

- As headteacher, you are also science coordinator, and you have established a systematic assessment programme that keeps a close eye on pupil progress in science. As necessary, extra support for pupils who seem to be falling behind is effectively deployed. Good analysis of subject knowledge gaps in pupil learning trigger catch-up lessons in science.
- You have correctly identified that teachers are less confident about how to teach scientific enquiry than they are about conveying subject knowledge. You have also spotted the relatively thin volume of investigative work done by pupils. Practical resources are sufficient and well organised.
- The school is working on developmental marking in all subjects, with evidence of good impact in science books in Year 6. Occasionally, teachers correct the work, rather than direct an action for pupils to take in making that correction for themselves. No recent externally-led professional development has been organised in science.

Areas for improvement, which we discussed, include:

- increasing the time available for pupils to think about and plan investigations for themselves, in order for pupils to learn by experience the reasons behind the methods of scientific enquiry
- extending the part pupils play in determining what they want to find out about in science, along similar lines to the major projects already in place
- sharpening the demand of developmental feedback comments so that pupils can take actions on the spot to improve their work.

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