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24 February 2012

Mr D Hardie Headteacher Thomlinson Junior School High Street Wigton Cumbria CA7 9PG

Dear Mr Hardie

Ofsted 2011–12 subject survey inspection programme: science

Thank you for your hospitality and cooperation, and that of your staff and pupils, during my visit with John Meinke AI, on 8 February 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 five lessons.

The overall effectiveness of science is satisfactory.

Achievement in science

Achievement in science is satisfactory.

- Pupils enter Year 3 with broadly average attainment, and school records confirm that they make satisfactory progress in science to achieve broadly average attainment by the end of Year 6. The work in pupils' books does show steady improvement over time and is consistent with the expected levels of performance by Year 6.
- Pupil work is marked, with some helpful commentary. Older pupils do not know the levels that they are working to in science, or have a clear idea of what they need to do to improve. The school has focussed its efforts on raising attainment in English, and that emphasis is also evident in science, with pupils being encouraged to use the technical words in their report writing.

Pupils enjoy science, and recognise the opportunities to study the outdoor environment that arise through the schools 'adventure learning' project. They could recount enjoyable science experiments. They do not receive regular science homework.

Quality of teaching in science

The quality of teaching in science is satisfactory.

- Well-planned lessons take account of pupils' prior learning, particularly so in Years 3 and 4. Scrutiny of work shows pupils tackling the main content from different starting points.
- Most lessons began briskly, with little time lost though classroom organisation or teacher discourse. Sometimes, teachers missed opportunities to extend the learning of pupils who had already grasped the main idea.
- In the best examples seen, the activities for pupils were accurately pitched at just the right level to challenge each pupil, and retain their interest. However, in some cases, the task was too difficult, requiring the teacher to intervene with more support. Some investigations proved too complex for pupils to get scientifically useful results to support the hypothesis. This resulted in pupils not always achieving the planned learning outcome by themselves.
- Teachers try hard to relate the science activity to current events in the news, or use the local environment as source materials, and work well with a local plastics manufacturer.

Quality of the curriculum in science

The quality of the curriculum in science is satisfactory.

- Good opportunities are in place for pupils to appreciate the application of scientific ideas through various 'adventure learning' activities, which would serve as a good stimulus for extended writing about science.
- Practical resources are sufficient to meet the teaching demands, and kept under regular review by the science coordinator. These are supplemented by a range of trips, such as a residential trip to London and its museums, that give pupils additional access to science activities.
- Opportunities for pupils to extend their learning through independent study and research beyond the classroom, for example through homework, are limited.
- Some activities are not well matched to pupil learning needs, although are based on potentially good ideas in terms of using topical news items or examples from the local environment.

Effectiveness of leadership and management in science

The effectiveness of leadership and management in science is satisfactory.

- The recent focus by staff on literacy and numeracy has been rightly driven by the need to improve pupil progress in these areas; science is not a cause for concern and was a strongly performing subject in 2009 National tests. This has resulted in very little science-specific staff development or training, at any level, in recent years.
- The day-to-day monitoring of science occurs via staff discussion and some work scrutiny, with internal staff moderation of teacher-assessed levels. No regular moderation of these assessments occurs with other local schools or the local authority. The school is now moving to a computerbased tracking system that will have science progress data more easily available for staff and managers to monitor progress.
- Potentially, the subject leader could regularly check the content of shortterm planning, to ensure that lessons are consistent with the national curriculum and pitched at an appropriate level to meet pupils' learning needs. At present, no effective links to support teacher subject knowledge exist with local schools.
- The 'adventure learning' approach does result in pupils who are resilient to difficulties, keen to learn more, and well disciplined in their approach to practical work.

Areas for improvement, which we discussed, include:

- using information about pupil prior learning to ensure that learning activities fully meet their needs and are pitched to allow independent learning without the need for too much additional teacher support
- involving pupils more in feedback about how well they are doing, what they are aiming for, and what they need to do to reach that target in science
- improving the rigour of monitoring the quality of the curriculum and its delivery.

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