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21 February 2013

Mrs A Lawton
Headteacher
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Dear Mrs Lawton

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 11 February 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; scrutiny of relevant documentation; analysis of pupils' work; and accompanied visits to six lessons.

The overall effectiveness of science is good.

Achievement in science

Achievement in science is good.

- Levels of attainment in science vary considerably from pupil to pupil, from as low as recordable to the early levels of the National Curriculum. For each pupil, some aspects of knowledge and skills in science may be much more advanced than others, leading to a 'spikey' profile of attainment. Progress for most pupils is often made in very small steps.
- Nearly all pupils are on the autistic spectrum. Despite having many barriers to learning, including some that particularly hinder learning in science, all pupils make measureable progress in science.
- Learning in science makes a good contribution towards the core purposes of the school, including improved communication and social skills and the self-management of behaviour.

- Learning in science is largely through sensory experience. For example, pupils learn about the cold through touch and contact with ice. They develop the language of science, and order and compare their experiences through the medium of pictorial communication. By this means, pupils who are non-verbal demonstrate their learning in science.

Quality of teaching in science

The quality of teaching in science is good.

- Staff are expert in their knowledge and understanding of the needs of pupils on the autistic spectrum and this enables them to create the right conditions for learning in science. They know how far to challenge pupils with new ideas and activities, so that pupils do not become over-anxious.
- Teachers ensure pupils' experience of science is first-hand, both within the classroom and outdoors. Lessons in science, which are often part of a wider theme, are often aimed at helping pupils make sense of their world, such as learning about their bodies, plants, animals and the weather.
- Teachers record and assess pupils' progress in science carefully through photographs and pictorial sentences.

Quality of the curriculum in science

The quality of the curriculum in science is good.

- The content of the science curriculum is based securely on the National Curriculum Programmes of Study. However, the approach to planning is more closely related to the Early Years Foundation Stage in its promotion of knowledge and understanding of the world through exploration. This approach best meets the learning needs of the pupils.
- The relevance to pupils, and first-hand opportunities for pupils' own exploration of the environment guide teachers' choice of curriculum content. A study of life and living things is therefore prominent in science lessons. Lessons involving materials and their properties and physical processes are also undertaken but are planned to a lesser extent than those for living things.
- Science is closely integrated with other subjects and aspects of the curriculum. For example, science is linked with technology within food technology and communication and social skills are promoted in every lesson. The school has exciting plans to introduce new technology, through the deployment of computer 'tablets', to extend pupils' means of communication and recording, including in science.
- The science curriculum is enriched well through the school's provision for learning outside of school. For example, opportunities for pupils to go tobogganing at a local winter-sports facility are used to promote learning in science. The school also subscribes to the British Science Association's National Science and Engineering Week, which provides autism-specific resources.

Effectiveness of leadership in, and management of, science

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

- The science co-ordinator has a science background. She has a good understanding of the science curriculum.
- There are clear plans for the leadership of science. However, at present these are too focused on resource issues and not sufficiently aimed at improving teaching and learning in science to further raise achievement in science.
- The school has made a good start in assessing and tracking the progress of pupils in science. It is taking a lead in working with other special schools to moderate assessments to ensure accuracy. Senior leaders are beginning to evaluate the information that monitoring provides to hold staff to account for pupils' progress in science. However, to date, the governing body is not yet involved in this process.

Areas for improvement, which we discussed, include:

- providing more opportunities for pupils to learn about physical properties and materials and their properties
- re-focussing the leadership of science towards improving teaching and learning and so raising pupils' achievement in science
- ensuring the governing body is fully involved in holding the school to account for pupils' progress in 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 Padgett
Her Majesty's Inspector