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Miss J Adams Headteacher Mather Street Primary School Mather Street Failsworth Manchester M35 ODT

Dear Miss Adams

Ofsted survey inspection programme – science

Thank you for your hospitality and co-operation, and that of your staff, during my visit on 05 March 2007 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. All feedback letters will be published on the Ofsted website at the end of each half-term.

The evidence used to inform the judgements made included: interviews with staff and pupils, scrutiny of relevant documentation, analysis of pupils' work and observation of lessons.

The overall effectiveness of science was judged to be good.

Achievement and standards

Achievement and standards in science are satisfactory.

- At Key Stage 2 the proportion of pupils gaining level 4 and above in science has improved significantly since 2004 and 2005, when it was below average, to 95% in 2006.
- The proportion of pupils gaining level 5 in science at Key Stage 2 improved to 33% in 2006, although this remains below national average.
- Data which take account of prior attainment and contextual factors show that pupils' progress during Key Stage 2 has improved significantly since 2004, and in 2006 progress was satisfactory.

- Written work seen was satisfactory. Some pupils' work showed that while they could describe their observations they had more difficulty explaining them.
- Behaviour in the lessons observed was very good.

## Quality of teaching and learning

Teaching and learning in science are good.

- Observed science lessons were well planned and included a good range of practical and hands on activities which engaged interest and motivated pupils.
- In some lessons pupils had good opportunities to talk about scientific ideas. For example, in one lesson the teacher gave groups of pupils two minutes of 'chatterbox time' when she asked a question. This gave all pupils an opportunity to participate and discuss their ideas before one was chosen to formally respond to the whole class. This was very well managed, with pupils quietened again quickly so that no time was wasted.
- In some lessons good emphasis is given to developing specialist vocabulary. For example, in a year 2 lesson the teacher and two teaching assistants took care to encourage pupils to use scientific words in describing the forces used to move toys, mould clay and make balloon animals.
- Teachers make some good use of question and answer techniques to involve pupils, check understanding and revise work from earlier lessons.
- Teachers are sensitive to individual concerns. For example, in the lesson involving an activity using balloons, the teacher quickly spotted a pupil who was afraid of balloons and arranged for him to do different but relevant work in an adjacent area.
- Some excellent use of educational software was observed. In one
  lesson pupils used laptops and a very good simulation programme to
  measure the melting point of a wide range of materials including rock,
  gold and tin. This enhanced the teaching of melting points, and the
  gasps of amazement as pupils discovered the high temperatures
  needed clearly showed the impact on their learning.
- Teachers are encouraging and supportive and use praise well.
- Good use is made of interactive electronic whiteboards in lessons.
- On occasion, activities are not sufficiently focused on scientific aspects
  of the work. For example, in a lesson about plant life cycles pupils
  concentrated on accurate observational drawing of fruits, and there
  were missed opportunities to encourage them to think about the
  functions of different parts of the fruit.
- Lessons do not always give sufficient emphasis to the need to explain observations as well as describe them.
- Assessment is well planned and there are regular end of topic assessments.

 Appropriate individual pupil targets are set annually and progress towards these is assessed termly. The science coordinator, together with individual class teachers, uses this information to identify issues to be addressed and to plan relevant interventions, challenge and support.

## Quality of curriculum

The curriculum in science is good.

- A new scheme of work has been purchased. This has been welcomed by teachers who are using it to develop more hands on and practical work which is enhancing pupils' learning. Pupils spoke enthusiastically about their science lessons and clearly enjoy them.
- Some opportunities to make cross curricular links are being developed.
   For example, in one science topic pupils use their literacy skills to write letters about aspects of their science work, simulating the role of a company offering materials testing services to business.
- The school has a valuable link with a local high school and through this has benefited from an industry sponsored 'Bright Sparks' electricity day with Year 6 pupils.

Leadership and management of science

Leadership and management of science are good.

- The school's own evaluation of science, in the form of a position paper, acknowledges the weaknesses that existed previously in science achievement, and provides a comprehensive account of the improvements made in the last two years.
- Leadership and management have clearly focused on raising achievement. Strategies to tackle underachievement have been identified and implemented to good effect, as the improvement in results at Key Stage 2 demonstrates.
- There is good teamwork. The science coordinator taught science throughout the school in 2005/06 and has shared relevant learning resources and materials for interactive whiteboards with all teachers.
- Science resources have been improved, enabling teachers to use a much wider range of activities in science lessons.
- Booster classes are used to help improve pupil achievement.
- Good use has been made of the link with a local high school, to the benefit of teachers and pupils.

Inclusion

Inclusion is good.

- Teaching assistants are used appropriately in science lessons. They are well prepared and give particularly good assistance with group activities.
- Pupils with additional learning needs are well supported.

Areas for improvement, which we discussed, included:

- improve differentiation in lessons to ensure that work is matched to individual pupils' abilities, so that all make as much progress as possible and more able pupils are appropriately challenged
- improve opportunities to extend scientific thinking and learning through the full range of activities
- provide more opportunities for pupils to explain their results and observations, rather than simply describing them.

I hope these observations are useful as you continue to develop science in the school.

As I explained in my previous letter, a copy of this letter will be sent to your local authority and will be published on Ofsted's website. It will also be available to the team for your next institutional inspection.

Yours sincerely

Ruth James Her Majesty's Inspector