Aviation House 125 Kingsway London WC2B 6SE

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



7 February 2012

Mrs A Parkin Principal Booker Park Community School Stoke Leys Close Aylesbury Buckinghamshire HP21 9ET

Dear Mrs Parkin

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 on 24 January 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 and discussions with staff; 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.

- Data charting pupils' progress over the last three years show year-on-year improvement in the proportion of pupils within the upper quartile of the national progression materials for pupils with statements of special educational needs and/or disabilities. The school provided a convincing account of why the few pupils who did not make such good progress could not do so.
- Levels of attainment in science vary enormously because of the range of pupils' special educational needs and/or disabilities. Rather than learning science in a conventional sense, pupils with the most profound and complex learning and medical needs are, and often remain, at the stage of registering a reaction to sensory stimulus. In contrast, some pupils on the less severe parts of the autistic spectrum attain at age-related levels in aspects of their science work; for example, at Level 4 of the National

Curriculum at age 11. However, for all pupils, their attainment profiles in science have peaks and troughs. For example, the knowledge of facts relating to science of pupils on the autistic spectrum is often considerably more advanced than their ability to apply their knowledge to solve problems or to take part in investigations.

- All pupils from all the identified categories of need make the same good or better progress from their starting points. No group underachieves.
- Pupils enjoyed the hands-on nature of the science lessons observed. They had good attitudes to learning that showed, for example, how science motivated pupils with behavioural, emotional and social difficulties, enabling them to achieve well.

Quality of teaching in science

The quality of teaching in science is good.

- Teachers understand the learning needs of the pupils very well. Staff have a high level of expertise for each of the categories of learning needs. Teachers apply this knowledge very effectively when they teach science. For example, in a lesson on feeding birds, part of a project on winter for pupils in Years 1 and 2, including those with severe learning difficulties, the teacher carefully restricted the choices of material for making a bird feeder. This gave the pupils in the class who find choosing difficult a better opportunity to succeed. High levels of challenge and support were exceptionally well illustrated in a lesson for the pupils with the most profound and complex learning difficulties and conditions. Pupils experienced a wide range of sensory stimuli in a darkened room, against a background of evocative music. The lesson was successful in challenging the children, who showed clear reactions to the intense experience.
- Teachers asked open questions to stimulate responses and thinking. Lessons were planned thoroughly with learning objectives that were differentiated appropriately for the pupils' differing stages and levels of understanding. The work of teaching assistants was effective, necessarily so, as they were fully involved in teaching and learning with individual pupils and small groups. Each class has a senior teaching assistant who works closely with the teacher in planning lessons.

Quality of the curriculum in science

The quality of the curriculum in science is good.

- The hands-on teaching approach has a strong affinity with effective learning for the pupils. A large proportion of lesson time is spent exploring through the senses and helping pupils to communicate what they are experiencing. This is successfully achieved for most. However, for the most able pupils, the motivation that science provides to raise the quality of written work is not fully exploited.
- The science curriculum is broad and balanced. It is made highly relevant, as science is taught within contexts that are meaningful to pupils. The

school makes good use of its local heritage to promote science, for example, pupils observing the air ambulance from the nearby Stoke Mandeville Hospital then organising a helicopter landing in the school grounds. Also in a science project linked to the stories of Roald Dahl. The science curriculum builds effectively on the 'knowledge and understanding of the world' in the Early Years Foundation Stage.

■ The school arranges many visits out of school and invites many visitors into school. In addition, the school has an extensive programme of extracurricular activities that impact on pupils' learning in science.

Effectiveness of leadership and management in science

The effectiveness of leadership and management in science is good.

- Since the previous Section 5 inspection, in May 2010, the school has been restructured. All levels of leadership and management have been affected, including senior and subject leadership.
- The senior leadership is making a significant impact on learning in science through maintaining a rigorous overview of teaching quality and the progress that pupils make. The school is building from a strong track record of improving achievement and has a good capacity for further improvement.
- Because of the difficulty of measuring the often very small increments in learning made by many pupils, the school uses a wide variety of assessment resources, including the national progression materials, to come to judgements about pupils' progress and next steps.
- Subject leadership within the new structure is in the early stages of promising developments. The new team of three teachers has expertise across the full range of the pupils' learning needs. Subject leadership training is underway. However, as yet, the science team is not yet ready to lead innovation within science.

Areas for improvement, which we discussed, include:

- ensuring that science contributes more to pupils' progress in literacy for the more able pupils
- embedding subject leadership in science to provide a clear focus for further improvement 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

Her Majesty's Inspector