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16 November 2012

Ms J Longhurst Headteacher Orleans Park School Richmond Road Twickenham TW1 3BB

Dear Ms Longhurst

# **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 14 and 15 November 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; observation of seven lessons, drop-in to four lessons and a visit to STEM club.

The overall effectiveness of science is good.

## **Achievement in science**

Achievement in science is good.

- Pupils' attainment at Key Stage 3 is good and the children make good progress with their science studies. All the pupils taking GCSE single sciences in 2012 passed with A\* to C grades and around two thirds achieved the highest grades.
- Outcomes for pupils taking GCSE core and additional science were also above national averages and the trend is generally positive over the past few years. A small number of pupils successfully take a Level 1 certificate of achievement science course each year.
- The majority of pupils make good progress in science whilst at Orleans Park. However those pupils, about 15% of the year group, who are entitled to free school meals make slightly slower progress. Managers

and teachers are aware of this and strategies are in place to address this.

- Pupils' written work in science is of a good standard. They work safely in the laboratories and enjoy a good balance of theory and practical work.
- A high proportion of Year 11 pupils progress to further education in science, technology, engineering and mathematics (STEM) subjects.

## Quality of teaching in science

The quality of teaching in science is good.

- Teachers plan their lessons very well and share the learning objectives with their students. Practical work is safely carried out, well integrated into lessons and the pupils enjoy their work.
- Pupils enjoy a good range of interesting and relevant activities in science lessons that are carefully adapted to meet their abilities and stage of development. This was especially apparent in groups of lower ability.
- In a minority of lessons, activities are not always differentiated to meet the full range of pupils' abilities. A few teachers do not always check to make sure that all the pupils have completed written tasks.
- Teachers use information technology well to introduce topics and stimulate the pupils' interest. A high proportion of homework is available to the pupils electronically on the school's intranet.
- Pupils' work is well marked and regularly scrutinised. Teachers' comments are helpful and, in most cases, the pupils know what they have to do to improve. In a minority of cases, however, marking is less thorough and teachers do not always follow up their comments to ensure that the pupils have made corrections or completed work.
- Tracking and monitoring are well developed and teachers are well aware of the progress pupils make in their classes. Teachers successfully support pupils in Year 8 to make the transition to Key Stage 4 study and in Year 10 and 11 to achieve the best they can.
- Pupils' behaviour in science lessons is very good. They cooperate well with each other and show respect for each other. They respond well to planning investigations, show developing confidence with scientific terminology and work safely in the laboratories.

## Quality of the curriculum in science

The quality of the curriculum in science is good.

The science curriculum in years 7 and 8 is broad and balanced and meets the needs of the pupils well. It has an appropriate focus on how science works and the pupils are enthusiastic about their studies.

- Pupils start their GCSE studies in year 9 and the decisions on whether to take core and additional or separate sciences are finalised by the end of the autumn term.
- Enrichment activities in science are well organised and succeed in enthusing and interesting the pupils. A wide range of talks and visits to museums and conferences take place each year. Younger pupils take part in regular STEM club and science club activities. Older pupils take mentoring role in these clubs.

#### Effectiveness of leadership in, and management of, science

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

- The science department is well led by a small team of teachers who took on the responsibilities last year. They have worked hard, consulted their colleagues effectively and provide effective leadership to the department.
- Morale is high in the science team and teachers are proud of the success of the pupils. They are well qualified and participate in well organised opportunities for relevant professional development.
- The laboratories are well supplied with specialist equipment for practical work and technicians provide a highly effective service for investigative work.
- The day to day operational management of science is well organised; time tabling is efficient, assessments are regular and accurate and the curricula are well planned and reviewed.
- The science team's self-assessment report clearly identifies the key strengths and areas for improvement. Judgements arising from the observation of teaching, learning and assessment are rigorous.

#### Areas for improvement, which we discussed, include:

- raising attainment for pupils identified as under-performing by intervening earlier in their studies
- making sure that pupils undertake differentiated activities in line with their ability and stage of development
- ensuring that all marking is of a consistently high standard and that pupils complete corrections and act on teachers' comments.

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.

Yours sincerely

#### Alex Falconer Her Majesty's Inspector