Aviation House 125 Kingsway London WC2B 6SE

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



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Mr A Gray Headteacher Sandringham School The Ridgeway St Albans Hertfordshire AL4 9NX

Dear Mr Gray

Ofsted 2010-11 subject survey inspection programme: science

Thank you for your hospitality and cooperation, and that of the staff and students, during my visit on 26 and 27 January 2011 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 students; scrutiny of relevant documentation; analysis of students' work; and observation of eight lessons.

The overall effectiveness of science is outstanding.

Achievement in science

Achievement in science is outstanding.

- Students make outstanding progress between Years 7 and 11 and their attainment in science at the end of Year 11 is high. The percentage of students attaining two or more A* to C GCSE grades in science is well above average.
- Students demonstrate high levels of independence; they are able to generate interesting questions and show a high level of skill in researching information and in designing and carrying out investigations.
- The percentage of students attaining A* to B grades in A-level biology and chemistry examinations is significantly above average.
- Students make good progress in their learning on A-level courses. However, progress is stronger in Year 13 than in Year 12. The department has rightly identified the need for greater levels of support and guidance

to be given to those students in Year 12 who find the transition from GCSE to A level particularly challenging.

- The increasing number of students choosing to follow science-, mathematics- or engineering-related courses at university is evidence of students' rising enjoyment and achievement in science.
- The behaviour of students in lessons is outstanding. They work extremely well both individually or in groups and carry out practical tasks sensibly and safely.

Quality of teaching in science

The quality of teaching in science is outstanding.

- Teachers have excellent knowledge of their subject and examination requirements and are enthusiastic about the teaching of science.
- Lessons are characterised by very good relationships between staff and students. There is a culture of respect and concern for the success of all individuals within the department.
- Students describe how available teachers are to answer their questions, and help them answer problems they encounter with their work. Older students are particularly appreciative of the support and extra revision classes that teachers provide outside of lesson time.
- Teachers use a range of strategies to engage and interest students and students speak very positively about the quality of teaching that they receive.
- A key feature of teaching in the department is the range of opportunities provided for students to develop their independent learning skills. Students respond extremely well to these opportunities and this contributes very positively to the progress they make in lessons.
- Assessment is systematic and thorough. Books are marked regularly and helpful feedback is given to students about how to improve their work.

Quality of the curriculum in science

The quality of the curriculum in science is outstanding.

- Science is taught in relevant contexts that make it interesting and enjoyable for students.
- The school's specialist status in science has helped further develop curriculum links with feeder primary schools, aiding transition.
- A two-year Key Stage 3 science curriculum has been developed extremely well by the department and features a clear and effective focus on developing students' skills of scientific enquiry.
- A broad range of science courses is available to students in Key Stage 4 and Key Stage 5, that meets their needs and aspirations extremely well. The curriculum is monitored continually and changes are made each year so that it is tailored to the needs and abilities of individual cohorts.

- Although a vocational science course is available to students in Key Stage 4, no such course is currently available to students at a higher level in the sixth form.
- The school's specialist status has enabled the department to make available to students and the wider community a wide range of enrichment activities in science. These contribute positively to students' enjoyment of and interest in science.

Effectiveness of leadership and management in science

Leadership and management in science are outstanding.

- The head of science has established a cohesive team in which communication is a strength, enabling staff to work together extremely well to provide a high-quality science education for all students.
- The head of science is well informed of current educational thinking and developments and leads the department extremely well.
- Systems of monitoring and evaluation are strong and the annual selfassessment summary produced by the department is accurate and incisive.
- A good plan is in place to drive further improvement in science.
- The targets set for students are suitably challenging and the progress of students towards these targets is monitored well. Underachieving students are quickly identified and provided with support.
- Staff are provided with good opportunities for professional development. For example, a number of staff have recently attended science-based courses at the local National Science Learning Centre.

Areas for improvement, which we discussed, include:

ensuring that those students in Year 12 who find the transition from GCSE to A level particularly difficult are provided with sufficient guidance and support to enable them to achieve highly.

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

As I 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. Except in the case of academies, a copy of this letter is also being sent to your local authority.

Yours sincerely

Peter Sanderson Her Majesty's Inspector