Alexandra House 33 Kingsway London WC2B 6SE T 08456 404040 F 020 7421 6855 <u>www.ofsted.gov.uk</u> enguiries@ofsted.gov.uk



19 June 2009

Mr M Leeming Headteacher Crofton School Marks Road Stubbington Fareham Hampshire PO14 2AT

Dear Mr Leeming

Ofsted 2009-10 subject survey inspection programme: Science

Thank you for your hospitality and co-operation, and that of your staff when we visited the school on 17-18 June 2009 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 students, scrutiny of relevant documentation, analysis of students' work and observation of lessons.

The overall effectiveness of science was judged to be satisfactory

Achievement and standards

Overall standards are at least in line with or just above the national average and achievement is satisfactory overall.

- At GCSE just under a quarter of all students, those who are more able, take all three science subjects (triple science). Results in 2008 were above national averages especially at the higher grades.
- The majority of students took double science GCSE and, although outcomes were just above national standards for five A\* C, few students reached the highest grades. The department did not meet the targets set as part of specialist science college status.
- Predictions and GCSE outcomes for tests already taken indicate that attainment is set to improve in 2009 and 2010. Students' progress is improving although the standards they reach in their GCSEs do not always reflect their abilities. The school has evidence that the gap between predicted results and targets is narrowing.

- Younger students show good attitudes to learning. They are keen and enthusiastic scientists who enjoy lessons especially when they are practically based giving them plenty of opportunities to develop their skills through investigating and finding out. They are less enthusiastic when they are limited to bookwork and copying from the board.
- Older students do not enjoy their science as much as younger ones. They say they rarely do practical work and report that too many lessons are over-directed by the teachers, giving them few opportunities for carrying out their own original work.
- In better lessons students behave well and engage with their learning. Where lessons do not involve students as active learners they quickly become bored and inattentive, although still remaining reasonably well behaved.
- The marking of students' work is variable. Some books are marked regularly while others are looked at by the teacher very rarely. Students are given limited advice and feedback on either the standard of their work or what they need to do to improve.

## Quality of teaching and learning of science

The overall quality of teaching and learning in science is satisfactory.

- The quality of teaching in lessons observed was variable but broadly satisfactory overall. Some classes receive very good teaching that excites and stimulates their interest in science. In other classes teaching is inadequate where students are given little opportunity to work as independent learners. Teaching styles are too often focused mainly on content delivery with little scope for developing skills.
- The quality of teaching in the lower school is better than for GCSE students. Teachers use more strategies that help students to learn and enjoy their science. In too many Key Stage 4 lessons a limited range of learning activities are used.
- The impact of investigative science on teaching is limited. The role of scientific enquiry in teaching science is not fully understood across the department.
- Younger students are positive about the quality of teaching they receive in science and say they enjoy science. Older students are much less positive and too many say they feel science is boring and of little relevance to them, their lives and their futures.
- Assessment arrangements give limited feedback to the students. Performance data is collected, analysed and used to identify underachievement. However, the follow up strategies used by teachers to support students are inconsistent. There are no common and agreed practices used by all teachers to mark work and give feedback to students.

Quality of the curriculum

The quality of the curriculum is satisfactory.

• The triple science provision is effective in meeting the need of more able students. It provides a good springboard for possible future studies.

- All other students take the double science course. This is appropriate provision for most students but there are some for whom different courses would be more suitable. The school is in the process of introducing an alternative science course for these students in September 2009.
- A good range of outreach activities and initiatives has been established with local businesses and providers through science college status. There is considerable potential for this work to improve the profile of science significantly.
- The impact of science college status within school is more limited. There has been some cross-curricular work and a programme of extracurricular activities, but the outcomes for students are restricted.

Leadership and management of science

Leadership and management in science are inadequate.

- The department uses an extensive database of information on student performance to track progress and identify underachievement. The use of this information by teachers with their classes is very variable and there is little continuity across classes in the same year or across year groups.
- Management systems within the department are inadequate and some basic mistakes are made. For example, a few students being entered for incorrect tiers of entry for their GCSE examinations.
- Evaluation and review of the work of the department is inadequate and provides limited basis for further development. Management systems are not strong enough to secure a good capacity for further improvement.
- There is no clear direction and ethos within the science department. As a result there is too much variability in teaching and lack of agreement on a common approach to improving teaching and learning.
- There is strong support from the senior leadership team. They have a clear grasp of the issues in science and are determined to improve the quality of science education for the students.

Areas for improvement, which we discussed, included:

- making sure that all students' work is regularly and thoroughly marked and gives them clear and consistent feedback on the level of their work and what they need to do to improve
- accelerating the development of teaching and learning in science with a stronger emphasis on 'how science works' and encouraging greater engagement and enjoyment of science
- ensuring that leadership and management is robust enough to bring about the necessary and urgent improvements required to raise standards and achievement in science.

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 the Ofsted website. It will also be available to the team for your next institutional inspection.

Yours sincerely

Christine Jones Her Majesty's Inspector