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Sister Bernadette Headteacher Virgo Fidelis Convent Senior School 147 Central Hill Upper Norwood London SE19 1RS

Dear Sister Bernadette

# **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 11 and 12 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 four lessons.

The overall effectiveness of science is good.

## Achievement in science

Achievement in science is good.

- Students' attainment at the end of Year 9 improved in 2010 as the dip in outcomes in 2009 was tackled promptly by the department. In particular, the number of students reaching the higher Level 6 improved significantly.
- At Key Stage 4, students' attainment rose again in 2010 continuing the improvement seen in 2009. Once again, almost twice as many students gained two or more A\* to C GCSEs in science or equivalent compared with 2008. This outcome is well above the national average and reflects recent changes to the school's science curriculum provision.
- The introduction of a vocational BTEC science course for some students has contributed significantly to this improvement. Students' attitudes to science have improved as they see the work as more relevant to their interests.

- Students make good progress towards meeting the challenging targets set. These targets raise their aspirations and many are determined to meet them, although in some cases these targets are very demanding.
- Students show good attitudes to learning and behave well. They are enthusiastic scientists and enjoy practical sessions that give them plenty of opportunities to develop their skills through investigation. When given the opportunity, students work well independently and with others.

### Quality of teaching in science

The quality of teaching in science is good.

- Teaching is mostly effective in ensuring students are motivated and engaged with their learning. Lessons are particularly successful where teachers approach their teaching with humour and enthusiasm and encourage the students to contribute their own ideas and opinions.
- Teachers have a clear understanding of the value of their subject and this is communicated effectively to the students. They have a good level of subject expertise and use it well in their teaching.
- Good and imaginative use is made of resources, including information and communication technology, to support and enhance learning.
- An outstanding approach to systematic assessment is producing performance data that are accessible to all teachers and used to monitor students' progress thoroughly. Assessments are designed carefully to cover all aspects of the scientific process and knowledge, including skills such as critical thinking. The outcomes of assessment are readily available to parents through an innovative 'e-portal' on the school's website and many parents use this facility regularly.
- The regular, formal assessments are marked thoroughly and used to give good feedback to both students and teachers. However, the marking of other work completed by the students is less informative and gives limited feedback on how to improve.

#### Quality of the curriculum in science

The quality of the curriculum in science is good.

- The curriculum is broad, balanced and informed well by current initiatives in science education.
- The diversity of provision in Key Stage 4 ensures a wide range of courses is available from academic to vocational. These meet a wide range of needs. For example, students intending to follow further academic courses in science are able to study individual sciences at GCSE while other students are keen to study BTEC science as a preparation for other vocational courses.
- The science curriculum in Key Stage 3 prepares students well for their GCSE or equivalent studies. However, the overall school strategy used to group students and organise the lower school classes makes it difficult to

move students between classes according to their developing and changing needs.

- Good links with other subject areas enhance the science curriculum.
- The range of science activities taking place outside of lessons is very limited other than the extra support and booster sessions.

### Effectiveness of leadership and management in science

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

- The department is well managed and very focused on seeking further improvement.
- Good monitoring and tracking of the work of the department result in good self-evaluation. This gives a clear view of the strengths and areas for further development and is aimed at raising standards and improving provision. In addition, performance data are analysed rigorously and evaluated to make sure that provision meets the students' needs.
- The departmental team works together well and good collaboration allows the sharing of good practice resulting in improving teaching. Team members are keen to develop their skills and make sure they access available subject training such as that provided by the local science learning centres.

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

- ensuring greater consistency in the day-to-day marking of students' work, other than the formal assessments, to give students more information and guidance on how to improve their work
- developing more opportunities for students to be involved in science enrichment activities outside of the classroom that promote their engagement in the subject.

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

Christine Jones Her Majesty's Inspector