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Dear Mrs Khanna

Ofsted 2012–13 subject survey inspection programme: science

Thank you for your hospitality and cooperation, and that of your staff and students, during my visit on 9 and 10 May 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 students; scrutiny of relevant documentation; analysis of students' work; and observation of eight lessons.

The overall effectiveness of science is satisfactory.

Achievement in science

Achievement in science is satisfactory.

- Key Stage 3 students' achievement is improving slowly. Lower ability students are achieving well but the more able students do not perform as well as they could as the lessons are not challenging enough and they do not make enough progress.
- In Key Stage 4, most students take BTEC science courses and outcomes are improving as the progress they make also improves. In 2011, over 90% of students gained double award BTEC science. The few students who took the triple science course did not perform as well and outcomes were low.
- The introduction of BTEC science has contributed to improving students' attitudes to science as they see the work as more relevant to their interests.

- Where lessons are well taught, students show good attitudes to learning especially in sessions that give them plenty of opportunities to develop their skills through investigating and finding out. When given the opportunity students work well independently and with others.
- A small range of science courses is available in the sixth form. Some students take a Level 3 forensic science course and others study psychology. Information provided by the school indicates that these students are making good progress.

Quality of teaching in science

The quality of teaching in science is satisfactory

- The quality of teaching is satisfactory overall, but varies as staff turnover in the department is high and the school has experienced difficulties in replacing experienced teachers.
- Teaching is more successful where a varied range of activities ensures that students are motivated and engaged with their learning. Students are happier in lessons where teachers approach their teaching with humour and enthusiasm and encourage the students to contribute their own ideas and opinions. Students are clear that there is still too much low level disruption in lessons and this interferes with their learning.
- Teachers are starting to plan for a wider range of strategies in their lessons that support learning. An increased focus on key science skills is supported by the joint approach to curriculum planning with the art department.
- Systematic assessment strategies produce performance data which are accessible to all teachers and are used to monitor students' progress. This is more successful in Key Stage 4 where assessment strategies have to reflect the requirements of BTEC examination assessments.
- In Key Stage 3, the department has introduced its own assessment and marking system. This is not fully embedded into everyday teaching practices and does not yet give students appropriate guidance on the standard and quality of their work and how it could be improved.

Quality of the curriculum in science

The quality of the curriculum in science is satisfactory.

- The Key Stage 3 curriculum is moving away from a published scheme as the department starts to plan its own scheme of work that provides a more secure foundation for further study.
- In Key Stage 4, the current emphasis is on a vocational approach to science through BTEC courses with only a few students taking science GCSE courses. Future curriculum plans are based on the majority of students taking GCSE science courses rather than BTEC. Students are receiving their entitlement to study three separate sciences at GCSE.

- The school is adopting an innovative approach to raising achievement in science through using its visual arts specialist status. A new 'Sci-art' course has been introduced into Key Stage 3 that links aspects of science with a practically orientated art course. Students enjoy this course and it has improved their interest and enthusiasm for science.

Effectiveness of leadership and management in science

The effectiveness of leadership and management in science is satisfactory.

- The subject leader is well informed about current developments in science and the future of the science curriculum. There is a clear understanding of the strengths and weaknesses of science provision and how to address the issues. In particular, the department is working hard to plan the move towards teaching more GCSE science and less BTEC.
- The work of the department has been affected significantly by the staff changes and recruitment difficulties. An extensive range of policies and planning is in place but this has not yet become integrated into everyday working practices across the department. It has been difficult to develop a shared common purpose and priorities among those involved in teaching science.

Areas for improvement, which we discussed, include:

- ensuring the marking and assessment of students' work gives them better feedback on the standard and quality of their work and how it could be improved
- strengthening the monitoring of specific departmental policies and how they are embedding into teachers' everyday practices and supporting improvement.

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

Christine Jones
Her Majesty's Inspector