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Mr M Parr-Burman
Headteacher
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Dear Mr Parr-Burman

Ofsted survey inspection programme – Science

Thank you for your hospitality and co-operation, and that of your staff, during my visit on 21-22 January 2008 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 yourself, senior staff, the head of department for science and with students, discussions with teachers, scrutiny of relevant documentation, analysis of students' work and observation of seven lessons.

The overall effectiveness of science was judged to be good.

Achievement and standards

Achievement in science is good and standards are above average.

- About 70% of students taking science achieve a good pass in their GCSE examinations, which is above the national average. Although standards vary from one cohort to the next, there is a rising trend in standards in science at Years 9 and 11.
- Standards in science are consistently higher in science than in most other subjects, a factor in the school's decision to apply for specialist science college status in 2004.
- Relatively few students reach the highest grades in their GCSE examinations.
- In lessons, students often demonstrate good knowledge and understanding of science. However, their investigative skills are less well developed.

- Most students enjoy science and their high standards contribute positively to their future economic well-being.
- The students I talked to acknowledge that they could try harder in lessons and make better progress. The attitude to learning of a small minority of students is unsatisfactory.

Quality of teaching and learning of science

The quality of teaching and learning in science are good, overall.

- The quality of teaching is of a high standard. Teachers have excellent subject knowledge and frequently make difficult concepts understandable by very effective modelling. Teachers enjoy very good relationships with their students.
- Lessons are well prepared. Teachers plan a variety of tasks in each lesson that actively engage and interest most students. Good use is made of interactive whiteboards. Teachers involve the students in assessing their progress and make them aware of the levels they are working at. This helps students know whether they are on course to reach their targets.
- Teachers' care for students is good. They make every effort to ensure students' health and safety during practical work. Teachers give guidance to students in lessons based firmly on their knowledge of students' learning needs.
- Students' work is often well presented in their exercise books. Marking clearly identifies levels but does not always indicate the next steps required.
- In some lessons, the quality of teaching is higher than the quality of learning because a minority of students are inattentive.
- In many lessons, teaching assistants are deployed to support students with learning or behaviour difficulties. Overall, they make little impact on learning in science.

Quality of the curriculum

The quality of the science curriculum is good.

- The science curriculum is broad and balanced and meets the needs of students. Teachers often make learning more relevant to students by relating the science to students' lives.
- The school has introduced GCSE courses in biology, chemistry and physics for the most able science students to add to the single and double award science courses it has taught in the past.
- The department has plans to introduce an additional applied science course to make the subject more relevant for students who do not intend to focus on science post-16.
- The science department provides a range of extra-curricular activities for students to develop their interests in science further and to prepare for examinations. Residential field courses often have a science theme and make good use of the opportunities for science available in Norfolk and neighbouring Cambridgeshire.

- The department is closely involved with its associated primary schools through the school's specialist science college status. Evaluations from the primary schools of the value they place on this outreach involvement are very positive and are reflected in the good attitude towards science demonstrated by Year 7 students.

Leadership and management of science

The leadership and management of science are good.

- You provide effective support and challenge to the science department; for example, through analysis of examination results and through lesson observations.
- The department is well led and managed by the head of science. She has seen the department successfully through a difficult period of staffing instability. The department now has a set of teachers and technicians who work very well together and who provide a dynamic mix of experience and new thinking.

Inclusion

The arrangements to promote inclusion within science are good.

- The school has a high proportion of students with learning and behaviour difficulties, including a high proportion of students with a statement of special educational need. The school is set within an area of considerable rural deprivation. The science department meets these challenges to the achievement of students very well, as can be seen in students' above average standards and good achievement.
- The department is sensitive to the relatively higher attainment of boys compared to girls, and is committed to raising the aspirations of girls in science. It does not, as yet, track the progress of students at risk of underachieving through the impact of rural deprivation.
- Within this positive picture, more could be made of the support available for students within science lessons. The inflexible use of teaching assistants to support individuals means that, at times, teachers cannot call on their co-professionals to support learning or target support where it is most needed.

Areas for improvement, which we discussed, included:

- improving the attitudes of the small minority of students who currently do not try as hard as they should
- ensuring support in science lessons is targeted where it is needed most to promote achievement in science
- developing further the students' investigation skills
- tracking the progress of students vulnerable to underachievement because of rural deprivation and poverty, intervening where necessary.

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

Brian Padgett
Her Majesty's Inspector