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Miss J Partridge
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Dear Miss Partridge

Ofsted 2011–12 subject survey inspection programme: science

Thank you for your hospitality and cooperation, and that of the staff and students during my visit on 19 and 20 September 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; scrutiny of relevant documentation; analysis of pupils' work; and observation of nine lessons.

The overall effectiveness of science is good.

Achievement in science

Achievement in science is good.

- Achievement has improved over the past two years as science provision is now more successful in meeting students' needs. Improvement is linked to the close monitoring of individual performance and the strong focus on tracking achievement and raising attainment.
- Outcomes in 2011 improved significantly in both Key Stages 3 and 4. By the end of Key Stage 3, most pupils reached the expected level 5 or higher. At the end of Key Stage 4 in 2011, most pupils gained A* to C grades in their science courses with over a quarter gaining the higher A* or A grades. This reflected the success of the new BTEC science courses and the intensive intervention and support strategies that are in place.

- In Year 12, the outcomes for students taking BTEC course was very good. However, outcomes were below expectations for the small number of students taking the advanced course in human biology.
- Students with special educational needs and/or disabilities make good progress due to the clear identification of their individual needs and intensive support they receive.
- Behaviour in lessons is good. Most students show good attitudes to learning. They are enthusiastic scientists and enjoy lessons that are practical-based.

Quality of teaching in science

The quality of teaching in science is satisfactory.

- Some classes, particularly those of older GCSE students, receive good teaching that excites and stimulates interest in science. In some other classes, a narrow range of teaching styles gives students limited opportunities to work as independent learners, for example where teaching is too focused on content delivery.
- Current lesson planning emphasises team teaching and group working activities that aim to make best use of the new facilities. This approach is still being developed by the team and the strategies for teaching science classes together in large groups do not always secure successful learning.
- The new assessment and marking arrangements are producing performance data that are accessible to all teachers. Outcomes are interrogated thoroughly by staff to track progress of groups and individuals. Students appreciate the good verbal feedback they receive during lessons. The quality of written developmental feedback does not always give sufficient advice on how to improve their work.
- Outcomes of the assessment and tracking systems are used well to identify students who are underachieving and then to put in place intervention and support to improve learning. The students acknowledge that this is very successful in helping them to reach good standards at GCSE.

Quality of the curriculum in science

The quality of the curriculum in science is good.

- A good range of courses in Year 10 and 11 meet the needs of the students. The school is currently moving away from the high number of students taking science BTEC courses to a more balanced arrangement where more students are able to take double and triple science courses.
- The Key Stage 3 curriculum uses a published scheme that allows for the key stage to be completed in Years 7 & 8. Students then make a start to their Key Stage 4 science courses while they are still in Year 9.
- Enrichment activities are Science, Technology, Engineering and Mathematics (STEM) based and take place both in and out of school time.

These activities have been disrupted by the move to the new building but good links are now being forged with outside agencies and local schools.

Effectiveness of leadership and management in science

The effectiveness of leadership and management in science is good.

- Science is well managed in the context of a school where accountability is clear. There are strong line management links to the senior leadership team that support the department in improving the quality of science education.
- The work of the science department is regularly evaluated and reviewed using thorough data analysis. This provides a strong basis for further development.
- Training for teachers is well organised and there are good opportunities for courses that are closely linked both to the needs of the teachers and their students.
- Team collaboration in developing the curriculum and producing schemes of work that meet the diverse needs of the students is good.

Areas for improvement, which we discussed, include:

- extending and developing the team teaching strategies to ensure that learning is successful for large groups of students
- ensuring that all teachers widen the range of teaching strategies they use both in and outside of laboratories in order to engage the students with their learning.

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. A copy of this letter is also being sent to your local authority.

Yours sincerely

Christine Jones
Her Majesty's Inspector