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Mrs J Nellis Headteacher Halifax High at Wellesley Park Gibbet Street Halifax West Yorkshire HX2 OBA

Dear Mrs Nellis

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 8 and 9 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, students and members of the parents' council; scrutiny of relevant documentation; analysis of students' work; and observation of six lessons. A house assembly was also observed.

The overall effectiveness of science is good.

Achievement in science

Achievement in science is good.

- Students from all groups make above average progress in science. This includes students who have chosen to follow academic and those who have chosen vocational pathways in science. All groups exceed challenging targets. Students made good progress in the lessons observed, such as in their understanding of the refraction of light as it passes through different materials in a Year 11 physics lesson, and of the food chain in a Year 7 biology lesson for students with special educational needs.
- Although a small proportion of students attain the highest standards, attainment in science is broadly average. Where it is currently below average, standards are rising to narrow the gap in performance between these students and others. Standards are currently higher in biology and chemistry than in physics, reflecting the cultural and community

- aspirations for students to follow careers in the health and pharmaceutical professions.
- Students enter Year 7 with levels of attainment that are low, typically a year behind the national average in basic skills. For many students, poor communication and literacy skills impact negatively on science. Although the school adds considerable value to students' achievements, improving language and literacy through science is a continuing focus in the raising of standards in science.
- Students enjoy science lessons. They particularly enjoy practical investigations which they approach responsibly and during which they show resourcefulness and independence. Students interviewed were quite clear in their view of the value of practical work in helping their understanding of science. Of particular note is the rapid progress being made by girls in science, particularly those of Pakistani heritage. Girls now form the majority of the students in the upper sets. They are highly motivated with excellent attitudes towards learning science.

Quality of teaching in science

The quality of teaching in science is good.

- The relationships between teachers and students are exceptionally good. The quality of teaching in each aspect of science and of each course is equally effective. Most students behave very well in science lessons so learning proceeds smoothly. Teachers know their students extremely well and provide them with highly effective care, support and guidance. Students know this and value their teachers highly. Students put their teachers as the main reason for their enjoyment of lessons.
- Each science lesson follows a clear structure, consistently applied. Each lesson contains: clear lesson objectives; differentiated tasks to provide appropriate challenge for students at different levels; and, an end-of-lesson review of learning achieved.
- Teachers have a detailed knowledge of students' levels of understanding and they systematically involve them in assessment and in identifying the science understanding they need as a next step. Students work towards challenging targets. Their work in science exercise books is of satisfactory quality, restricted in some cases by writing of a limited standard. All work is marked by teachers but students are not always provided with written feedback to consolidate students' understanding of what has been achieved and how improvements can be made.

Quality of the curriculum in science

The quality of the curriculum in science is good.

■ The school offers courses of study at Key Stage 4 that provide students of all aptitudes with the opportunity to gain a qualification in science. These comprise separate sciences (biology, physics and chemistry), core and

- additional science, BTEC science, and entry-level science for students with special educational needs.
- Science is very popular. More students wish to study science at Key Stage 4 than can be accommodated because of limitations in laboratory space. For example, the new BTEC course, now in its second year, is proving popular and successful with students looking to work in science-related occupations An extra BTEC class is running this year.
- Science is enriched well within and outside of school. Students make visits to universities and sixth forms to promote science as a career. Last year 23% of students leaving the school opted to study science post-16. Science is also a subject considered within the school's transition arrangements with eight local primary schools.
- The school has good-quality resources for science and laboratories that facilitate practical work in science. Practical work features prominently within the science curriculum.

Effectiveness of leadership and management in science

The effectiveness of leadership and management in science is good.

- The school's senior leadership has a direct and positive impact on science through its promotion of teaching quality, ethos, analysis of students' performance, the monitoring of teaching and performance management, the development of the curriculum and school improvement strategies, including building on the outcomes of the previous section 5 inspection. This can be clearly seen in the work of the science department; for example, in the consistency and quality of lesson planning.
- The science department is well organised and well led and staff form a cohesive team. They have risen well to increased challenge from senior leaders and students are making better progress and reaching higher standards than ever before.

Areas for improvement, which we discussed, include:

- continuing to improve the links between science and literacy, particularly in the quality of writing about science
- improving marking to ensure that students have good quality written feedback on what they are doing well and what they need to learn next.

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

Brian Padgett Her Majesty's Inspector