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4 July 2011

Mrs C Hollister Headteacher Parklands High School Southport Road Chorley Lancashire PR7 1LL

Dear Mrs Hollister

# **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 22 and 23 June 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 seven lessons.

The overall effectiveness of science is outstanding.

#### Achievement in science

Achievement in science is outstanding.

- Attainment is high. The proportion of students gaining two or more GCSE A\* to C grades in science has consistently been well above the national average. The proportions of students gaining the top A\* and A grades in physics, chemistry and biology were well above the national averages in 2009 and 2010.
- Data which compare students' performance in GCSE science subjects with their performance in other subjects in the school show that students do significantly better in science.
- Students' prior attainment on entry to the school is above average and students make good progress over time reaching well above average standards by the time they leave. Students made good progress in the lessons observed.

In lessons, students' behaviour is outstanding. They display excellent attitudes to learning, applying themselves diligently to the tasks set. They collaborate well in group activities.

## Quality of teaching in science

The quality of teaching in science is good.

- Teachers are enthusiastic and they successfully communicate this to their students. Teachers are encouraging and supportive, but with high expectations of what students should achieve. Relationships in the classroom are very good.
- Lessons are very well planned and structured. They usually move at a rapid pace and incorporate a good range of activities which successfully motivates and interests students and reinforces knowledge. Learning materials are well presented. Learning in science is well contextualised.
- There are plenty of opportunities for collaborative work and students are given some good opportunities to discuss their ideas in science, and to explore their opinions about scientific issues, such as genetic screening.
- Minor weaknesses in the lessons observed included activities where too little time was allowed, large group sizes which resulted in some students not contributing very much, and an explanation that was not sufficiently clear.
- Although relatively little practical and experimental work was observed, schemes of work and discussions with students show that it is an integral part of science provision.
- Students know their targets and their progress towards these. Strategies to involve students more in peer- and self-assessment are developing well. Students' progress in science is assessed systematically.
- Work in students' books is well presented and marked regularly. Written comments help students to understand how to improve.

#### Quality of the curriculum in science

The quality of the curriculum in science is outstanding.

- The school offers an excellent range of courses at Key Stage 4 which meets the needs of all its students very well. This includes GCSEs in science, additional science, physics, chemistry and biology, additional applied science and a vocational course. Students are given appropriate guidance about courses in terms of their future aspirations.
- Planning is exceptionally detailed and schemes of work clearly show that there is a good emphasis on practical and experimental work. The Key Stage 3 curriculum promotes enjoyment of science and increasing numbers of students are choosing to study triple science at Key Stage 4.
- The wide range of enrichment activities such as clubs, trips, visits and speakers also benefits students.

Cross-curricular planning effectively links science topics with the development of particular literacy, numeracy and ICT skills.

### Effectiveness of leadership and management in science

The effectiveness of leadership and management in science is outstanding.

- The curriculum leader has a clear vision and provides effective leadership. She has successfully focused on meeting the needs of all students. Senior leaders have successfully established a culture that enables science to thrive. Teamwork in science is highly effective.
- Students' progress is tracked meticulously and underachievement quickly identified with targeted interventions put in place to address this. These have been evaluated and are clearly successful.
- Monitoring and evaluation are thorough and include analyses of science data, lesson observations and scrutiny of students' work. This information is used highly effectively to plan action to address identified weaknesses.
- There are very good opportunities for professional development including school strategies to improve teaching and learning along with external science-specific opportunities.
- Effective support is provided to newly qualified teachers and this helps them to develop into capable practitioners. The curriculum leader has also provided support to another school.
- Very good use is made of links with local teacher training institutions. As well as student placements, a recent project involved a detailed survey of students' experience of science which supplemented the school's own student voice work.

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

- continuing to drive up the quality of teaching so that more lessons are outstanding
- further developing opportunities for independent investigative work, involving students designing, planning and carrying out their own experiments.

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

#### Ruth James Her Majesty's Inspector