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Mr P Hasan-Richardson Headteacher The Albany School Broadstone Road Hornchurch Essex RM12 4AJ

Dear Mr Hasan-Richardson

Ofsted 2011–12 subject survey inspection programme: science

Thank you for your hospitality and cooperation, and that of your staff and students, during my visit on 19 and 20 January 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 10 lessons.

The overall effectiveness of science is good.

Achievement in science

Achievement in science is good.

- Attainment at Key Stages 3 and 4 has risen sharply in the past three years to above average. Given the average attainment of students on entry to the school, this represents good progress overall.
- Students, particularly younger ones, enjoy science and this is a direct result of a deliberate change to the way in which Key Stage 3 science is delivered.
- All students know how well they are doing, and day-to-day marking clearly tells them what could be better; students remember this advice well, but do not always make the corrections or improvements suggested.
- A lower than national average proportion of high ability students join the school in Year 7, but up to 2011, those few students did not make as good

progress as their peers. This first cohort of separate science students achieved good GCSE grades overall, but with fewer than expected A and A* grades. The school correctly identified the prime cause to be insufficient teaching time, and has corrected this for current students.

Quality of teaching in science

The quality of teaching in science is good.

- Medium-term planning is good, as are lesson plans, which identify likely prior learning as well as different levels of learning outcomes. Further refinement by way of identifying individual students' prior learning and their personal targets is not yet systematically written, although teachers apply their good knowledge of students in lessons to achieve this aim.
- Good teacher—student relationships allow a lively dialogue that encourages students to ask their own questions. Teachers' subject knowledge is then used to the best advantage for students, and, in turn, students want to find out even more about the topic.
- The best teaching occurs when students can quickly start on the planned practical or research activities. Occasionally, they have to wait for unnecessary repetition of instructions, or for other groups to complete the main task before being allowed to move on.
- The best learning occurs where the tasks are intellectually demanding, relate the science involved to real-world applications, and require students to think for themselves, not just carry out instructions.
- Occasionally, too much time is wasted in whole-class discussion that does not engage every student, or a task is assigned that is too easy. Both can lead to distracting behaviour.

Quality of the curriculum in science

The quality of the curriculum in science is outstanding.

- A hard-hitting review of poor science results three years ago found that students did not enjoy science at Key Stage 3, and then all had to follow the same double science pathway at Key Stage 4. New senior school leadership, and a new head of department, introduced radical changes to both Key Stages. Now, students in Year 7 do not have separate lessons for science, but it is taught as part of an integrated curriculum that includes English and humanities subjects. At Key Stage 4, about a third of students study BTEC applied science, a further third take core plus additional science, and the rest study the three separate science GCSEs.
- The school continues to review students' progress and their attitudes to science, and correlates this with the allocation of time and quality of teaching. As a result, the proportion of BTEC students is reducing, the proportion of triple science increasing along with more teaching time for these students, and a discrete science practical lesson each week in Year 7 (still integrated with the other subjects) will be introduced in the future.

- A systematic refurbishment of laboratories is helping to increase the profile of science within the school, and many of the laboratories have excellent displays of students' works, coupled with fascinating posters of scientists and applications of science.
- Part of the Year 7 programme includes dramatic input by experts from the Science Museum in London, systematic field trips and local environmental surveys, and specific teaching of the skills of scientific communication.

Effectiveness of leadership and management in science

The effectiveness of leadership and management in science is good.

- Frequent, accurate evaluation of the impact of teaching on outcomes for students drives a relentless change for the better, giving a palpable sense of energy and excitement that students recognise and enjoy.
- Students are set very ambitious targets which are posted in the science area for all to see, including their current progress towards them. These are never less than grade Cs, with the head of department and senior staff insisting that all students will achieve well. As a result of curriculum changes and improvements in teaching, the proportion of all students gaining two good science grades has risen from 41% to 81% in three years; the aim is 100% at grade C or better.
- With your active support, along with that of the line-managing deputy head, the head of department has a clear understanding of how to motivate reluctant students. He models the dynamism necessary to engage these students.
- Teachers and technical staff receive good in-house professional support, with additional access to external courses at science learning centres.

Areas for improvement, which we discussed, include:

- further improving lesson plans by identifying which students have achieved the various prior learning already noted, then ensuring that all students build on this from the outset
- monitoring the time spent by teachers in whole-class discourse, to maximise the time students spend learning by doing the science research or practical task.

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

Brian Cartwright Her Majesty's Inspector