

Aviation House
125 Kingsway
London
WC2B 6SE

T 0300 123 1231
F 020 7421 6855
enquiries@ofsted.gov.uk
www.ofsted.gov.uk



14 February 2012

Mr S Green
Principal
Christ's College
Larch Avenue
Guildford
GU1 1JY

Dear Mr Green

Ofsted 2011–12 subject survey inspection programme: mathematics

Thank you for your hospitality and cooperation, and that of the staff and students, during my visit on 7 and 8 February 2012 to look at work in mathematics.

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 five lessons.

The overall effectiveness of mathematics is satisfactory.

Achievement in mathematics

Achievement in mathematics is satisfactory.

- Following two years of below-average attainment, the 2011 results in GCSE mathematics improved to broadly average. The proportion of the students gaining the higher A* and A grades, however, was well below the national figure. Students in most year groups joined the school with a below-average profile of attainment. This was the case for the 2011 GCSE cohort but these students made faster progress than previous cohorts.
- In the sixth form, students make satisfactory progress at AS and A level but numbers are very small. Most have had lower-than-average starting points as they began their further study of mathematics in Year 12. However, the six students in the current Year 12 have above average starting points, reflecting the improving trend of results in GCSE mathematics examinations in Year 11.

- Boys and girls make similar rates of progress in mathematics but those known to be eligible for free school meals have achieved less well at GCSE than their peers. Notably, students whose attainment was just above average at Key Stage 2 also did less well, relative to their starting points, than those students with average or just below average attainment.
- Learning and progress of current students are mainly good and the gap between groups is closing rapidly. Approximately 63% of Year 11 students already have achieved a grade C or better in GCSE mathematics. A similar proportion is on track to make at least three levels of progress by the time they leave school. Apart from Year 9, other cohorts are also well on track to meet the school's improved expectations of students. The new faculty leader is addressing robustly the issue of the slower progress in Year 9.
- Most students work conscientiously in lessons but many are not presenting their work in an acceptable way and this is not challenged effectively by staff. Students often lack independence and perseverance in seeking solutions and rely heavily on their teachers. Students' recall of topics covered early is often hazy, not least because of the often algorithmic approach adopted by some staff to teaching algebra in particular.

Quality of teaching in mathematics

The quality of teaching in mathematics is satisfactory.

- Staff plan lessons carefully with an emphasis on students working through exercises to consolidate their skills. Classroom learning is supported by additional intervention and revision sessions to ensure that students gain at least a grade C in GCSE mathematics.
- The teaching observed ranged from good to inadequate. In some lessons, such as that in Year 8 on linear graphs, students were helped to develop their reasoning skills and to understand the relationships between the graphs through the well-considered exploration of a task using information and communication technology. In other lessons, however, students were mainly taught methods and spent time on too many similar questions.
- The use of assessment to support learning in lessons is variable. Some teachers use mini-whiteboards well, for example to check understanding. Others observe individual students as they work on exercises. Sometimes, teachers make no assessment of the students' understanding nor, indeed, of their progress through the written tasks. Marking, although mostly regular, is not used effectively to help students improve their work.

Quality of the curriculum in mathematics

The quality of the curriculum in mathematics is satisfactory.

- The drive to raise the students' attainment in mathematics has resulted in a curriculum that is strongly focused on examination specifications. Current schemes of work, although under review, give little guidance to staff on how to enrich the students' mathematical experiences. At present,

the schemes of work are not helpful enough to those of the staff who are inexperienced.

- The policy of early entry, though effective in helping to raise the proportion of students gaining grade C at GCSE, means that some able students do not continue their study of mathematics in any depth after they gain a higher grade at GCSE. This leaves them ill-prepared for post-16 mathematics. In discussion, some Year 11 students revealed poor recall and understanding of the basic tools of manipulative algebra, for example.
- Post-16 students also experience an examination-oriented approach to mathematics. The mathematics library has, for example, few books that encourage wider reading on the application of mathematics in society.

Effectiveness of leadership and management in mathematics

The effectiveness of leadership and management in mathematics is satisfactory.

- Following difficulties in the leadership and management of mathematics, the school has taken robust steps, recently placing an experienced head of faculty, a non-mathematician, in charge of the management of the department. This is bearing fruit: daily procedures, the central monitoring of the students' progress, and the policy on examinations are being managed effectively. The new faculty leader is providing good general guidance for inexperienced staff. There remains, however, the question of subject leadership. The school hopes to appoint this term a suitable mathematics leader to develop further the schemes of work, provide guidance to staff on how topics can be best approached, and encourage a richer curriculum.
- As part of the school's ongoing reviews of faculties, senior leaders are involved in the evaluation of the work of the mathematics department. This has led to the recent improvement in mathematics results.

Areas for improvement, which we discussed, include:

- sustaining recent improvement in students' attainment and progress by improving the consistency of teaching and assessment throughout all year groups
- ensuring that the schemes of work provide far greater guidance to staff on promoting students' understanding through an enriched curriculum
- promoting marking that supports students on how to improve their work
- ensuring that the successful management of the department is complemented effectively by strong subject leadership as soon as possible.

I hope that these observations are useful as you continue to develop mathematics 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

Sheila Nolan
Additional Inspector