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Mr D Curry Headteacher Bishop Heber High School Chester Road Malpas Cheshire SY14 8JD

Dear Mr Curry

Ofsted 2009-10 subject survey inspection programme: mathematics

Thank you for your hospitality and cooperation, and that of your staff, during my visit on 26 and 27 November 2009 to look at work in mathematics.

As outlined in our initial letter, as well as looking at key areas of the subject, the visit had a particular focus on the effectiveness of the school's approaches to improving the quality of teaching and learning 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.

The evidence used to inform the judgements included interviews with students and staff, scrutiny of relevant documentation, analysis of students' work and observation of nine lessons.

The overall effectiveness of the subject is good.

Achievement in mathematics

Achievement in mathematics is good.

- Attainment at the end of Key Stages 3 and 4 is above the national average. Although GCSE results dropped to average in 2008, provisional data for 2009 and modular examination results already obtained by current Year 11 students show stronger performance. These measures confirm that current attainment is similar to, and in some cases above, the above-average levels of 2006 and 2007.
- Students enter the school with attainment that is broadly average. In relation to their starting points, students make good progress in lessons and over their time in the school.

- Attainment in the sixth form is above average. Students achieve well in Alevel courses, including further mathematics. Recent results show a rise in the proportion of students obtaining the highest grades.
- There is no pattern of underachievement by any particular group. Although boys underachieved in 2008, provisional data indicate the gap in progress was narrowed considerably in 2009.
- Students show positive attitudes to mathematics. They respond well to the activities that they are given to do; most offer answers readily and seek help when they need it.

Quality of teaching of mathematics

The quality of teaching of mathematics is good.

- Teaching is consistently good. Strong relationships are evident. Teachers' questioning probe students' understanding well. Paired work, including discussion, helps students to feel engaged in the lessons. Teachers make effective use of a range of resources and practical activities that help students to learn. However, they do not exploit fully the potential of information and communication technology (ICT) and other display materials to give a visual focus for the whole class.
- Teachers focus consistently on developing students' conceptual understanding. Their strong subject knowledge enhances planning so that it takes full account of the progression of mathematical ideas, and, where possible, they demonstrate links between different areas of mathematics effectively. Teachers' consistent use of correct mathematical terminology and notation help students to become familiar with appropriate terms and conventions.
- Students appreciate the support available from teachers at lunchtimes and the facility to access revision materials at home.

Quality of the mathematics curriculum

The quality of the mathematics curriculum is satisfactory.

- At Key Stage 4, the school provides students with a satisfactory range of qualifications. A clear commitment to tailoring provision to meet the needs of individuals is evident, for example through offering AS qualifications in Year 11. The sixth form offers students a good range of opportunities, including A-level further mathematics and a GCSE course for students who wish to improve their grade. Students' positive attitudes to, and enjoyment of, mathematics is leading to increasing numbers opting to take the subject at A level.
- Schemes of work give broad guidance on what to teach. However, the school recognises the need to develop the schemes further to offer teachers additional guidance on:
 - what approaches to adopt for individual topics
 - how and when they should focus on developing students' reasoning skills

 developing students' cross-curricular skills such as creativity or ICT skills.

Effectiveness of leadership and management of mathematics

The effectiveness of the leadership and management of mathematics is good.

- Good whole-school management structures, including 'Subject Area Reviews', contribute well to developments in mathematics.
- The department has good capacity to improve further. Self-evaluation is accurate and improvement planning is well focused. The school has an accurate view of teaching and learning and where improvements can be made. Leaders and managers responded successfully to a drop in GCSE results in 2008 through clear analysis of the reasons followed by appropriate actions. The gap in performance between boys and girls has been narrowed.
- High expectations and demanding targets are fostering positive attitudes within the mathematics department. The improved use of data is enabling support to be focused more sharply on students' needs.
- Monitoring processes do not ensure that students' experiences of using and applying mathematics are consistent.

Subject issue: the effectiveness of the school's approaches to improving the quality of teaching and learning in mathematics

- An excellent spirit of teamwork within the department, together with positive attitudes to developing practice further, contribute well to teachers' professional development through sharing good practice.
- Teachers work together well to promote consistent approaches to particular mathematical topics. Although not formalised or clearly recorded, this is helping to strengthen the continuity of students' learning.

Areas for improvement, which we discussed, include:

ensuring that all students have appropriate opportunities to develop their cross-curricular and reasoning skills, through offering more guidance in the scheme of work and monitoring students' experiences more closely.

I hope these observations are useful as you continue to develop mathematics in the school.

As explained in our previous letter, a copy of this letter will be sent to your local authority and will be published on the Ofsted website. It will also be available to the team for your next institutional inspection.

Yours sincerely

Paul Chambers Her Majesty's Inspector