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Mr M Colcombe  
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Dear Mr Colcombe

### **Ofsted 2013–14 subject survey inspection programme: mathematics**

Thank you for your hospitality and cooperation, and that of your staff and pupils, during my visit with Richard Light HMI on 24 June 2013 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 pupils; scrutiny of relevant documentation; analysis of pupils' work; and observation of 11 lessons and a working session with some of the older pupils.

### **The overall effectiveness of mathematics is good.**

#### **Achievement in mathematics is good.**

- The school was among the best nationally in 2012 for pupils' progress between the ages of 7 and 11. This success rests on careful tracking of pupils' relative strengths in mathematics. In regular pupil-progress meetings, teachers consider which pupils are likely to fall behind in mathematics and they then benefit from additional support. In 2012, boys achieved strongly, better than the girls. Pupils who eligible for support through the pupil premium funding achieved better than their classmates. In 2012, they were the equivalent of a year ahead by age 11.
- However, attainment at age 7 is low at the expected Level 2 and the higher Level 3. Few pupils also reach the higher Level 5 at age 11.

- Pupils are encouraged to use mathematical vocabulary with accuracy from the youngest age. For example, one five-year-old pupil could describe the properties of an octagon. Frequent problem-solving sessions are held most weeks and are usually linked to core practice in basic skills. As a result, pupils become fluent in number work and can calculate using standard and non-standard methods. They are able to explain their thinking well and show a good understanding of charts and data.
- Older pupils are able to manipulate simple algebraic expressions and they know about prime numbers, square numbers and how to use them in a range of problem-solving activities. They are able to go beyond calculations to make general statements using properties of numbers.

### **Teaching in mathematics is good.**

- Teaching is mostly good. It has many strengths. Regular use of practical resources, including new technology, helps keep sessions stimulating and interesting for pupils. Sessions are often practical and interactive. Relationships between adults and pupils are constructive thus helping pupils to develop positive attitudes to mathematics. Many claim it to be their favourite subject.
- Planning is good with explicit reference to how content will be adapted according to the ability of the pupils. Joint planning across year groups ensures a consistent curriculum is offered. Teachers use questioning well to promote opportunities for pupils to explain their thinking but not all follow up such questioning with additional challenge, especially for the more able. Teachers and pupils accurately identify the level at which they are working in readiness for the demands of the next stage of learning.
- Teachers' subject knowledge varies with some teachers showing considerable expertise but others, including teaching and learning assistants, expressing insecurity in some topics. This has an impact on how sessions evolve with the less confident adults tending to become more formal and closed in style which limits pupils' opportunities to develop their thinking. Occasionally, sessions are over brisk which leads to pupil's misconceptions lingering as teachers seek to cover content at the expense of developing understanding.
- Although the contribution of teaching and learning assistants is helpful, the impact of this team's work varies because some resort to developing their own methods of teaching as a result of insecure subject expertise.
- Marking is usually of good quality throughout the school, with helpful comments designed to promote better understanding. However, in some classes, inaccurate presentation can lead to casual errors.

### **The curriculum in mathematics is good.**

- The curriculum is enhanced well by extra activities that are carefully planned to support pupils with additional mathematical needs; for example, 'Numbers Count' sessions for pupils to practise number work.

- The curriculum is well resourced with special mathematics-themed weeks such as 'mathematics in art and nature' and the mysterious 'Room13' project which offer opportunities to apply mathematical knowledge in problem-solving contexts. Homework is used thoughtfully, including some innovative use of e-mailing tasks home. Pupils say they like the extra homework and challenge.
- Despite this richness, the variation in teaching quality means that some pupils miss out on the same opportunities as their peers, including some pupils of high ability and some in Key Stage 1. Individual pupils who show particular talent in the subject receive very useful additional support, for instance through links with other schools.

### **Leadership and management of mathematics are good.**

- Leadership in mathematics has been through a period of change in recent times. This has meant the monitoring of teaching quality and the curriculum has been 'light touch'. For example, work scrutiny is conducted annually rather than termly, although the school recognises more frequent monitoring is needed to strengthen teaching and achievement further. Similarly the outcomes of this monitoring have not been converted into a detailed subject action plan. Despite this, much good activity has continued and, in particular, the tracking of individual pupils' progress in the subject has continued with rigour.
- An effective programme of professional development involves lesson observation by the subject leader and of staff by their colleagues. However, some of the records of observation are general rather than providing precise mathematical detail. This misses opportunities to build on teachers' existing expertise.

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

- raising attainment in all year groups, particularly of girls and the more able pupils
- enhancing the monitoring of mathematics and use the outcomes to develop a more robust action plan
- reviewing the training and deployment of teaching and learning assistants to improve the effectiveness of their teaching and support for pupils' learning in mathematics.

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

As explained previously, this letter will be published on the Ofsted website. It may be used to inform decisions about any future inspection.

Yours sincerely

**Ceri Morgan**  
**Her Majesty's Inspector**