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Mrs R Camble  
Headteacher  
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Dear Mrs Camble

Ofsted 2009-10 subject survey inspection programme: mathematics

Thank you for your hospitality and cooperation, and that of the staff and pupils, during my visit on 9 February 2010 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 discussions with staff and pupils, scrutiny of relevant documentation, analysis of pupils' work and observation of parts of seven lessons and two intervention sessions.

The overall effectiveness of mathematics is good.

Achievement in mathematics

Achievement in mathematics is good.

- From a low base on entry to school, children make good progress in the Early Years Foundation Stage and, as a result, their attainment at the end of the Reception Year is just below average. Over the past two years, the proportion of children reaching expected levels in understanding of number and calculation has increased as a result of the specific focus on boosting skills in these areas.
- Good progress is maintained in Years 1 and 2. Standards at the end of Year 2 have improved over the past three years to slightly above the national average. Predictions for current Year 2 pupils show that this

upward trend is set to continue. Most are becoming confident in using the four operations to solve simple problems. Their reasoning skills develop well because of teachers' emphasis on 'explain your answer', although many struggle to articulate their ways of working. In lessons throughout the school, improving language skills is therefore a key focus.

- Pupils with special educational needs and/or disabilities benefit from being taught in small groups and from well-targeted interventions that tackle gaps in their learning or specific concepts that they struggle to understand. They make good progress and many attain Level 2 in assessments at the end of Year 2.

### Quality of teaching of mathematics

The quality of teaching of mathematics is good.

- Lessons generally promote a high level of engagement for all pupils right from the start. Teachers make good use of questions and demonstration, often supported by effective use of the interactive whiteboard, to promote pupils' understanding. There is a strong emphasis on using subject-specific language and encouraging pupils to understand what the terms mean. Occasionally, opportunities are missed to display key vocabulary for reference throughout the lesson and to model processes of calculation so that pupils have examples to which they might refer as they get involved in their independent tasks.
- Teachers make good use of assessment during lessons to adjust their planning and to modify teaching in the light of pupils' understanding. Tasks are generally matched well to build on pupils' prior learning but, as the school has identified, could occasionally provide greater challenge for the more able in each set. Teachers and teaching assistants make good use of time in the main part of lessons to support specific groups of pupils and to revisit mathematical concepts or reinforce understanding.

### Quality of the mathematics curriculum

The quality of the mathematics curriculum is good.

- Planning is based on local authority guidance and adapted by the school to take account of the range of abilities and needs in each teaching group. There is a good focus on teaching a specific aspect of mathematics over a sustained period, for example, handling data or understanding place value, so that pupils' skills are steadily developed and applied.
- A strong feature of provision is the emphasis on practical activities that are relevant to pupils' experiences and understanding. This is of particular benefit to pupils who are learning English as an additional language. Good use is made of resources. Staff are enterprising in using 'short cuts' to minimise the time spent on recording, for example, by photocopying pupils' initial working on individual whiteboards so that this can be retained. The provision of word-processed learning objectives or key questions for pupils to stick in their books means that they can

concentrate on their mathematics without having to record too much unnecessary detail.

- The school has devised useful guidance on problem-solving that includes a 'skills ladder' so that their progress in areas such as reasoning can be assessed. There is no specific guidance on teaching calculation skills. This has led to minor variation in practice that the subject leader has resolved. However, the lack of a policy means that current good practice in teaching efficient methods of calculation is not embedded across the school.

#### Effectiveness of leadership and management of mathematics

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

- A variety of monitoring activities contributes to planning for improvement. Regular lesson observations, scrutiny of planning and pupils' work and analysis of data enable leaders to identify areas for improvement and to quickly tackle the needs of pupils who are not making progress at the expected rate.
- The setting arrangements in Years 1 and 2 work well in narrowing the range of attainment that teachers need to tackle and are particularly effective in supporting learning for pupils with special educational needs and/or disabilities. Flexible use of teaching assistants and additional support sessions for small groups of pupils are key to ensuring good achievement and have contributed to the steady rise in standards in mathematics.
- Challenging targets are set for pupils' performance at the end of Year 2. The school is largely successful in meeting them. Pupils' progress towards the targets is monitored carefully so that provision can be adjusted where necessary.

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

- The expertise of the subject leader is used well to lead developments in teaching and learning. She advises on strategies for teaching particular aspects of mathematics, gives demonstration lessons and has led training on developing pupils' skills in problem-solving.
- Individual teachers are given helpful feedback when lessons are observed. This often includes useful points for development such as 'provide independent challenges for pupils who finish the activities, related to application or problem-solving' and 'ensure extension activities for the more able'.
- Support for individual teachers is provided, where necessary, through coaching, mentoring, partnership teaching and in-service training. This has resulted in improvements in the quality of teaching.

Areas for improvement, which we discussed, include:

- ensuring that teachers take every opportunity to model ways of working and display key vocabulary so that pupils have specific reference points to enable them to tackle their individual tasks
- formulating a calculations policy to secure current good practice and ensure consistent approaches in teaching number operations.

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

As I explained previously, 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

Shirley Billington  
Additional Inspector