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Mrs L Aldridge  
Headteacher  
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Dear Mrs Aldridge

Ofsted 2009-10 subject survey inspection programme: mathematics

Thank you for your hospitality and cooperation, and that of your staff, during my visit on 24 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 staff and pupils, scrutiny of relevant documentation, analysis of pupils' work and observation of two lessons and parts of four lessons.

The overall effectiveness of mathematics is satisfactory.

Achievement in mathematics

Achievement in mathematics is satisfactory.

- The school's records show that children enter Nursery with knowledge and skills well below those expected for their age. By the end of the Reception year, their attainment is below that expected for their age but this represents good progress in relation to their starting points. Pupils' knowledge and understanding of number, shape and calculation are more secure than their reasoning and problem-solving skills.
- Pupils make satisfactory progress through Key Stage 1 so that, by the end of Year 2, their attainment is below average.

- Pupils' progress through Key Stage 2 has declined over three years to satisfactory levels and standards have remained below average. However, action taken to reverse the trend is proving effective and their progress is now showing signs of improvement.
- The school's assessments indicate that, in the past, pupils' calculation skills and their capacity to solve mathematical problems have not been as secure as their understanding of shape and data-handling. Attention to these weaker areas is helping to promote pupils' understanding and improve their learning.
- The progress of average- and lower- attaining pupils is historically better than that of higher-attaining pupils. Although the challenge is being raised, there is scope to make it more consistent to enable all of these pupils to reach higher levels.
- Pupils behave well in lessons and have good attitudes to learning. They enjoy a challenge, are active and interested learners and eager to improve.

### Quality of teaching of mathematics

The quality of teaching of mathematics is satisfactory and improving rapidly.

- Good use is made of resources. For example, the use of stories with puppets in Year 1 and 2 engaged pupils' interest and extended their understanding of telling the time. Similarly, effective use is made of interactive whiteboards to explain difficult ideas, such as sequences and patterns with Reception children.
- Mental starter activities are of good quality and sometimes excellent; for example in Year 6, pupils became totally absorbed in a mathematical game designed to improve their quick recall of number facts.
- Assessment is used well to set targets and plan lessons. However, the activities provided for higher-attaining pupils are sometimes 'more of the same' rather than more demanding tasks. Increasingly, good support for pupils with special educational needs and/or disabilities is strengthening their numeracy skills.
- In the best lessons, pupils' mathematical vocabulary is developed very effectively through questioning and discussion, but there are times when teachers do most of the talking and younger pupils' use of mathematical language is restricted.
- Teachers are making increasingly good use of paired discussions and mini-whiteboards to help them to assess pupils' learning, identify misconceptions and remedy them. However, not all teachers are equally adept in adjusting the pace of the lesson to match pupils' rates of understanding.
- The marking of pupils' work is constructive and diagnostic, particularly in Key Stage 2, where pupils are left in no doubt of the next steps to take. Pupils are responding very positively to encouragement to assess their own learning.

## Quality of the mathematics curriculum

The quality of the mathematics curriculum is satisfactory.

- Teachers have been provided with clear guidance on how to teach calculation skills to ensure that the methods taught are consistent.
- The revised framework has been implemented fully, placing much greater emphasis on using and applying mathematics. However, the guidance provided for teachers is not sufficient to ensure that pupils' problem-solving skills are certain to develop systematically from year to year.
- The Early Years Foundation Stage curriculum provides rich opportunities for pupils to develop their understanding of number and shape. Using computers, working outdoors, and explaining their ideas to others are helping to improve their reasoning and problem-solving skills.
- The curriculum provides a good level of challenge and support for average- and lower-attaining pupils but does not fully meet the needs of more able pupils.
- Intervention strategies are proving effective in closing gaps and improving progress.

## Effectiveness of leadership and management of mathematics

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

- After raising standards in English, leaders have turned their attention to mathematics. They have identified what needs to be done and drawn up plans to promote improvement, and this is beginning to impact on learning.
- Analysing assessments, tracking pupils' progress and holding progress meetings with class teachers are proving effective in raising pupils' performance.
- Observing lessons and checking pupils' work in their books have not featured strongly in the improvement process. This makes it harder for leaders to ensure that their improvement plans are being consistently implemented.
- Although pupils' opinions are not formally collected through questionnaires, pupils say their views are taken into account when they complete the 'learning ladders' designed to promote self-assessment.

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

- The school's leaders are determined to secure good quality teaching, during a period of staff changes, by working alongside teachers and

leading by example. This is reflected in the confidence and competence shown by recently qualified staff.

- None of the staff are trained mathematicians with advanced subject expertise and there has been only limited involvement of mathematics consultants in the school's drive to raise standards. However, information from training courses, attended by senior staff, has been cascaded effectively to ensure that national changes and improvements to the teaching of mathematics are being introduced.

Areas for improvement, which we discussed, include:

- increasing the challenge in lessons for more able pupils
- ensuring that pupils' mathematical language is developed and extended in all lessons
- making more effective use of observing lessons and examining pupils' work to ensure that priorities for improvement are fully and consistently implemented.

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

Colin Smith  
Additional Inspector