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22 November 2013

Miss D Thompson Headteacher Pirton Hill Primary School Butely Road Luton LU4 9EX

Dear Miss Thompson

# **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 on 14 November 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 seven lessons.

## The overall effectiveness of mathematics requires improvement.

## Achievement in mathematics requires improvement.

- The changes made by the school's leaders have helped raise achievement in mathematics over the last year. Younger children make good progress to reach average standards by the end of Key Stage 1, but progress in Key Stage 2 requires improvement. Although they have made better progress over the last year, pupils in Years 5 and 6 have not yet made for up the slow progress they made earlier in Key Stage 2.
- The attainment and progress of pupils who completed Year 6 in 2013 continued the upward trend in results of national tests. The proportion of pupils making expected progress was in line with national figures, but relatively few made better than expected progress.
- Pupils supported by the Pupil Premium, which provides extra funding for disadvantaged pupils, make slightly slower progress than other pupils. In 2012, Year 6 pupils in the Pupil Premium group were, on average, less than half a term behind the other pupils.

Pupils enjoy mathematics and work well together. However, the teaching does not always develop their understanding. For example, pupils are taught how to calculate areas of rectangles and the mean of a set of numbers but the teaching does not help them understand the underlying concepts. Some pupils struggle to calculate accurately using the expanded methods of calculation that they are initially taught.

## Teaching in mathematics requires improvement.

- All teachers create a good climate for learning. They plan work to cater for pupils working at different levels, often making good use of their teaching assistants. Some of the teaching is good or better but there are also aspects that require improvement, often related to subject expertise.
- Lessons are not always designed to promote understanding. The questions are sometimes too similarly structured so they can all be answered by the same method rather than encouraging pupils to think afresh for themselves. For example, in one lesson nearly all of the word problems tackled by pupils required them to subtract one number from another.
- The best teaching includes opportunities for the teacher to observe and question pupils as they work independently. Subsequent teaching is then adjusted, based on the information gained, for example to deal with a common error or to reinforce key concepts. However, lessons are not always structured to create such assessment opportunities.
- Marking often includes comments, corrections and additional challenges that help pupils to improve. Despite recent changes to the marking policy, work is not always checked with enough care. Examples were seen where pupils were praised for work that was incorrect or incomplete.

# The curriculum in mathematics requires improvement.

- Pupils enjoy the 'Where's Molly?' mathematics challenges that appear in the corridors. Regular 'times table' activities are improving their basic knowledge. Leaders have made a conscious effort to develop a curriculum that promotes talk and engages pupils in applications of mathematics through practical activities, problem solving and real-world calculations.
- The curriculum experienced by pupils does not always match this ideal because of weaknesses in the guidance provided for teachers, for example on how conceptual understanding is expected to build progressively over time. Teachers share planning within their year teams, but do not always know if their approach is consistent with other year teams.
- Number work is one area where guidance, in the form of a calculation policy, is clear. However, the policy leads teachers to spend too much time teaching pupils to use expanded methods. While these methods help pupils to appreciate the role of place value, they are cumbersome, prone to error and sometimes confusing. Pupils do not get enough opportunity to learn and master the traditional, compact methods of calculation.

## Leadership and management of mathematics are good.

- The school's good capacity for improving mathematics is demonstrated by several years of rising standards and better progress, albeit from a low base. Leaders have taken a firm line to eradicate inadequate teaching and they are strongly committed to establishing good teaching as the norm. They hold teachers to account against challenging targets for pupils' progress. The mathematics coordinator has worked alongside colleagues to help them improve their questioning skills.
- Senior leaders and the mathematics coordinator monitor teaching and learning carefully through regular checks of pupils' books, formal observations and by dropping unannounced into lessons. Teachers get regular feedback to help them improve their practice. Areas for improvement, such as reducing 'teacher talk' and making better use of assessment, are followed up in subsequent lesson observations. However, this process does not always provide enough mathematics-specific detail.
- Assessment data is used well to identify any pupils at risk of falling behind. Extra support is given to these pupils and to other pupils who are disadvantaged in any way, such as pupils with little knowledge of English, disabled pupils and those with special educational needs.

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

- raising pupils' achievement in mathematics by:
  - planning more activities that aim to deepen pupils' understanding in a progressive way as they move up the school
  - ensuring that lesson activities provide a variety of challenges that require pupils to think about each question
  - revising the calculation policy to reduce the emphasis on expanded methods and to introduce efficient methods earlier to develop fluency
  - ensuring that work is marked accurately
- improving teaching and strengthen teachers' subject expertise by:
  - giving more attention to mathematical detail in feedback to staff
  - improving teachers' skills in planning assessment opportunities in lessons and in using the information to adapt their teaching.

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. A copy of this letter is also being sent to your local authority.

Yours sincerely

#### Stephen Abbott Her Majesty's Inspector