Alexandra House 33 Kingsway London WC2B 6SE

T 08456 404040 F 020 7421 6855 www.ofsted.gov.uk



02 June 2008

Mr G Leathers Headteacher King's Ford Junior School Gloucester Avenue Shrub End Colchester CO2 9AZ

Dear Mr Leathers

Ofsted 2007-08 subject survey inspection programme: mathematics

Thank you for your hospitality and co-operation, and that of your staff, during my visit on 21 and 22 May 2008 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 evidence used to inform the judgements included teacher and pupil interviews, scrutiny of relevant documentation and pupils' work, and four lesson observations.

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. All feedback letters will be published on the Ofsted website at the end of each half-term.

The overall effectiveness of the subject, mathematics, was judged to be good.

Achievement and standards

Achievement in mathematics is good and standards are average.

- After two good sets of results in 2005 and 2006, standards fell well below average in 2007. This coincided with a period of transition, during which the school had an acting headteacher and deputy headteacher and other staff changes. Achievement was good in 2006, satisfactory in 2007 and is now good again. Pupils in Years 5 and 6 have made good progress since joining the school, improving from below average standards on entry to average standards now.
- The school has developed a strong target setting and tracking system. Learning support is well planned and the school provides a range of effective intervention programmes, including: 'Playing for Success', which is popular with boys; the 'Domino' project, which encourages teachers to try new approaches to using and applying mathematics; and 'SATs Attack', a family learning project that has had a good response with some parents gaining adult numeracy qualifications.

• Pupils mostly enjoy mathematics and can explain their work to observers. They know their target levels and have a good sense of how well they are doing. The higher attaining pupils like challenging questions. Several pupils that I spoke to in the Year 4/5/6 classes showed a good level of understanding and demonstrated initiative, but others simply followed instructions to obtain the required answers.

Quality of teaching and learning of mathematics

The quality of teaching and learning of mathematics is good.

- Teaching and learning is good because the lessons are adapted to meet the needs of different groups; they involve group and paired work and feature a variety of approaches. A strong element is the school's growing focus on using and applying mathematics. During the inspection, pupils in the Year 4/5/6 classes were working on rich, week-long extended tasks.
- The project-based lessons are helping pupils to become more independent as teachers develop their skills in this style of teaching. The rich tasks offer many opportunities for pupils to think for themselves. However, teachers are still tempted to tell pupils how to complete the task, rather than developing their skills of enquiry. For example, in the 'theme park' task, when discussing the total gate receipts for 224 visitors at £5 each, one teacher asked 'What do you have to multiply 224 by?' A better question would have given less help. For example, 'How can we work out how much gate money was received on Day 1?'
- A good feature, seen in most lessons, was the availability of different levels of work to meet pupils' varying needs. However, in some cases, the lowest attaining pupils were given the same task with easier numbers when they really needed a less complex task to allow them to use and apply mathematics at their own level.
- Teachers adapt their teaching satisfactorily on the basis of their assessment during lessons, but they sometimes focus on one group for too long without checking on other groups. A Year 3/4 lesson on shopping was good in this respect, because the teacher moved from group to group, assessing informally, and left plenty of time to draw together the key learning points.
- Sometimes, pupils are encouraged to grade their own progress by indicating a smiley-face or sad face. However, this is not always a reliable guide, as accurate assessment requires a level of understanding that few pupils possess.

Quality of the mathematics curriculum

The quality of the mathematics curriculum is satisfactory.

- The school has bought two new resources and is planning to use elements of both. One provides a scheme of work with ready prepared lesson outlines and various supporting resources, including numerous worksheets. The other encourages a cross-curricular problem-solving approach that links well with the approach used in the neighbouring infants school. Plans for teachers to revise the mathematics scheme of work provide a good focus for professional development.
- Recent purchases have improved pupils' access to computers which are used well
 in some respects. Year 3/4 pupils enjoyed experimenting with the programming
 language LOGO to make interesting patterns; they made gains in their
 information and communications technology skills. However, other opportunities
 were missed in the holiday and theme park tasks, where a spreadsheet would

- have been a useful learning tool. The policy of loaning computers to pupils overnight to complete homework helps to address inequalities.
- The school's numeracy policy gives useful guidance on supporting and challenging the most able pupils. Additional challenges are sometimes incorporated in lesson planning, but this is not an area where teachers consistently meet all pupils' needs. Some pupils find it frustrating to listen to extended explanations of things they already know.

Leadership and management of mathematics

The leadership and management of mathematics are good.

- The monitoring and evaluation of mathematics teaching are good. Your lesson observations are accurate and focus on pupils' progress. Each lesson observation identifies strengths and areas for improvement. Your evaluations of the intervention programmes are effective and well-focused.
- You understand the quality of teaching and learning well and know where teachers' strengths lie. The school is trying to strengthen pupils' ability to learn independently and develop problem-solving skills, while maintaining a strong focus on establishing basic knowledge such as multiplication facts.
- Teachers' subject expertise is exposed at times: they have different levels of awareness of the common pitfalls and misconceptions in mathematics. It is an indication of effective leadership that they are prepared to take risks to develop the use and application of mathematics.

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

 As staffing has stabilised, the school is beginning to identify training needs systematically. Recent professional development has mostly been opportunistic – it relates to what is offered. Teachers prefer opportunities to share ideas with other teachers and would welcome the opportunity to observe each other teaching and to collaborate on joint planning.

Areas for improvement, which we discussed, included:

- improving questioning and informal assessment in lessons, so teachers can adapt their teaching to meet pupils' different needs
- improving school level planning by creating a more coherent scheme of work
- creating more opportunities for teachers to observe each other's lessons and to work collaboratively to revise the schemes of work.

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

Stephen Abbott Her Majesty's Inspector