

Alexandra House  
33 Kingsway  
London  
WC2B 6SE

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



12 March 2008

Mr M Manley  
Headteacher  
St Paul's Catholic School  
Phoenix Drive  
Leadenhall  
Milton Keynes  
MK6 5EN

Dear Mr Manley

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 10 and 11 March 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 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 evidence used to inform the judgements made included interviews with students and staff, scrutiny of relevant documentation, analysis of students' work and observation of seven lessons.

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

#### Achievement and standards

Achievement in mathematics is good and standards are above average.

- Results in national tests and examinations are above average and have been so for a number of years. Students achieve well in Years 7 to 9.
- Although standards in GCSE mathematics are regularly above average overall, the proportion of students gaining the highest A\* and A grades in 2007 was lower than that nationally. This was a consequence of entering significant numbers of students for GCSE in Year 10. Most gained grade C or better, but few achieved the highest grades. The school has subsequently reviewed this policy of early entry.
- Post-16 students achieve well at A Level. There is a high take-up rate for AS courses in Year 12.

- Attitudes to learning mathematics are generally good. Students are prepared to think for themselves.
- The presentation of students' work is too often careless and errors are not routinely followed up because staff do not give this high priority.

### Quality of teaching and learning of mathematics

The quality of teaching and learning of mathematics is good.

- Teaching is enthusiastic and knowledgeable. A real strength of most lessons seen was teachers' use of questioning to elicit students' open-ended responses in the following discussions. The cumulative effect over time is that students are well prepared to think for themselves and seek confidently to explore hypothesis and solutions. Students talk about their work, often sharing robust views with partners, and ask questions when they are unsure.
- Most teachers have good professional relationships with their classes and know individuals well. However, because teachers do not check students' written work often enough, notebooks are not genuinely helpful records of work covered or necessarily good revision aids.
- Students know the topics in which they have not performed well in tests. While they understand how well they have performed in tests in relation to national standards, they are less sure of how their day-to-day work in class and at home relates to their targets.
- Teachers plan lessons well to help students think about mathematics but not all ensure that students understand each step. Learning outcomes are often too general and planning to assess the learning of each individual in a lesson is not yet routine.

### Quality of the mathematics curriculum

The quality of the mathematics curriculum is satisfactory.

- The recent reversal of policy on the compressed GCSE mathematics course has required a revision of the schemes of work. This work is in process. However, completed units of work do not always provide teachers with sufficient guidance on how to structure small steps in learning or on likely successful methods to support understanding.
- The most able students in the current Year 11 are studying an AS unit
- Information and communication technology (ICT) is well used to demonstrate and model mathematical ideas. Students, however, indicate that opportunities to use ICT for themselves in exploring mathematics is rare.
- There is good informal mathematical education through the well-presented corridor and classroom displays that students use independently to recall topics previously covered.
- Students appreciate the personal attention and support they receive in holiday revision sessions and after-school clinics. There is also a popular after-school mathematics club.
- As a subject within the school's science specialism, mathematics has yet to have an impact in other subject areas.

## Leadership and management of mathematics

The leadership and management of mathematics are good.

- A mainly new and inexperienced group of mathematics teachers, formed within the last three years, is committed to raising standards which are rising. The new subject leader is well supported by the senior management team.
- Collaborative working within the department has produced a useful action plan to improve areas of provision and address, in particular, some underachievement at Key Stage 4.
- The input into departmental planning by the very few post-threshold staff does not differ significantly from that of the many recently qualified teachers.
- Assessment in the form of regular tests is used well and consistently to identify students' attainment and progress in relation to their targets. This, however, is not well supported by assessment of learning within lessons and by regular, diagnostic marking in students' notebooks.
- The monitoring and evaluation by senior managers of the department's work has led to a generally accurate view of the overall quality of mathematics provision. However, a strong focus on the impact of recent training has distracted attention away from students' learning in lessons and this has resulted in sometimes overgenerous judgements.

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

The school has had to re-staff its mathematics department almost completely in the last three years. Senior managers are very supportive of this mainly young, enthusiastic and committed team. As a result of the recognition of the need to develop both teaching and management skills within mathematics, the department has been part of a major project on 'Building Learning Power'. The impact of the training is clearly evident in many teachers' probing questioning and very good use of students' responses to elicit genuine thinking about mathematics. Senior managers have sought assiduously students' views of the changes in classroom practice. Through a learning review with a sharp focus on promoting thinking skills, the school has a clear view of the improvements made in teachers' practice. Senior and departmental leaders are also aware of where further intervention is needed through monitoring and support for individual teachers. The main result of this significant professional development is that most groups of students engage actively in mathematics lessons and gain in confidence in independent thought and exploration. It is not unusual to hear students arguing about a mathematical problem in their paired work.

## Inclusion

Inclusion in mathematics is satisfactory.

Most teachers know students well and setting is regularly reviewed to ensure that students receive appropriate help. Where individual support is required in lessons this is sensitively managed with learning assistants well informed of needs. However, in the absence of specialised support, classroom teachers do not always identify the help individuals may need. This also applies to some students at the very early stages of learning English. Able mathematicians with little English, for example, are

not necessarily placed in the appropriate group and their language needs are not always well catered for in mainstream classes.

Areas for improvement, which we discussed, included:

- continuing to support the mathematics team in the structuring of their lessons so that all teachers plan precise and detailed learning outcomes for lessons
- developing further teachers' understanding of how to assess students' learning in lessons
- ensuring students' notebooks are useful records of the work covered and include guidance on how to improve through regular and diagnostic marking
- continuing to use line management to support the leadership of the department in ensuring all staff contribute effectively to the work of the department.

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 local Learning and Skills Council and will be published on the Ofsted website. It will also be available to the team for your next institutional inspection.

Yours sincerely

Sheila Nolan  
Additional Inspector