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Mrs S Waterman, Ms M Leah-Wilkinson, Mr P Finegan and Ms J Rowlands
Co-Principals
The Leigh Technology Academy
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Dear Mrs Waterman, Ms Leah-Wilkinson, Mr Finegan and Ms Rowlands

Ofsted 2011–12 subject survey inspection programme: mathematics

Thank you for your hospitality and cooperation, and that of your staff and students, during my visit on 8 and 9 February 2012 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 students; scrutiny of relevant documentation; analysis of students' work; and the observation of nine lessons, four of which were with senior staff, which involved seeing the work of 12 teachers.

The overall effectiveness of mathematics is satisfactory.

Achievement in mathematics

Achievement in mathematics is satisfactory.

- Students make the progress expected by the end of Key Stage 4. Progress over both key stages is improving, but for quite different reasons. In Key Stage 3, the emphasis on functional skills and mathematical thinking is now greater; in Key Stage 4, the focus on meeting examination requirements is very strong. Progress in the sixth form has been a cause for concern over recent years but it is now securely satisfactory due to more appropriate course entry requirements and better teaching.
- Students' attainment has been below average for several years but it is currently improving, and is now in line with national averages. A much smaller proportion of students than average attain the highest grades at GCSE but this relates, in part, to the presence of selective schools in the locality.

- Girls' achievement has been weaker than boys', and the more able have not made as much progress as their peers, over recent years. These issues have now been addressed by well-targeted support and intervention. Students with disabilities and those with special educational needs make satisfactory progress due to the good support they receive from specialist support staff in lessons, and the work being well adapted to their needs.

Quality of teaching in mathematics

The quality of teaching in mathematics is satisfactory.

- The system of team teaching of large groups of students, used extensively at Key Stage 3, allows for new staff to be inducted into the department quickly and effectively. Staff are able to share ideas and learn from each other while undertaking joint lesson planning and working together in classrooms. This contributes to there being no teaching that is less than satisfactory.
- In such collaborative teaching arrangements, students are given work appropriate to their abilities and a range of adults offer good support and challenge. This approach has supported better progress over Key Stage 3.
- However, the collaborative approach is not developed sufficiently to allow teaching that is good or outstanding to flourish. For example, the planning of these lessons does not currently accent diagnostic elements of teaching and capitalise on the potential for rapid and flexible intervention.
- Teaching at Key Stage 4 is very closely aligned to students' attaining specific grades at GCSE and it sometimes fails to make connections between different aspects of the course or relate mathematics to students' lives strongly enough to secure good quality of learning.

Quality of the curriculum in mathematics

The quality of the curriculum in mathematics is satisfactory.

- Work of an appropriately demanding nature is presented to all students. More-able mathematicians follow the Additional Mathematics course in Year 11 to prepare them for A level, and many chose to take GCSE statistics as an after-school voluntary activity. A small number who struggle in the subject are able to gain a Functional Skills qualification which helps them to secure a college place.
- The department emphasises the acquisition of appropriate GCSE grades for students by closely aligning the Key Stage 4 curriculum to the specific needs of each year group. These needs have been identified for students currently in Year 11 with many of them having already sat two GCSE examinations in consecutive terms. The scheme of work for Year 11 is designed to address specific weaknesses in examination performance. This is serving to raise attainment but does so at the expense of providing a broad, rich and ultimately more satisfying mathematical experience.

- At Key Stage 3, students have more opportunity to gain a rounded sense of mathematics. Opportunities to apply learning in real contexts often tend to be a supplement to learning, however, rather than being central to it.
- The curriculum in the sixth form is based on the A-level specification. It has recently been reorganised to allow for the involvement of more teachers in delivering the core units, and other units have now been chosen with better regard to the strengths and needs of students.

Effectiveness of leadership and management in mathematics

The effectiveness of leadership and management in mathematics is satisfactory.

- The sense of shared ambition for students' achievement is palpable, driven strongly by the new subject leader. The department is taking heart from the current positive trajectory in attainment in Key Stage 4, while demonstrating an understanding that the means by which this is coming about will only take it so far.
- Teaching is sometimes judged optimistically, but underlying strengths and development needs are identified accurately. Staff have a range of good continuing professional development opportunities.
- The department prioritises its work well; development plans interpret whole-academy priorities appropriately within the context of the department's work.
- Students' achievements are gauged accurately and the information is used in a targeted and effective manner. However, the heavy reliance on the use of examinations for diagnostic purposes is leading to some 'examination fatigue' and disaffection.

Areas for improvement, which we discussed, include:

- defining what constitutes good and outstanding teaching, particularly in the context of collaborative teaching at Key Stage 3, so as to unleash the potential of staff to drive up the quality of learning more strongly
- redesigning the Key Stage 4 curriculum so that the purposes and applications of mathematics can be better appreciated by students, who can then develop a more rounded appreciation of the subject
- reducing the external examination burden on students by adopting more frequent internal assessments, which have a greater capacity to be experienced as an integral part of their learning.

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

As explained previously, a copy of this letter will be published on the Ofsted website. It may be used to inform decisions about any future inspection.

Yours sincerely
Alan Taylor-Bennett
Her Majesty's Inspector