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Dear Mr Rowlinson

## Ofsted survey inspection programme – Design and Technology

Thank you for your hospitality and co-operation, and that of your staff, during my visit on 12-13 November to look at work in D&T.

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 staff and students, scrutiny of relevant documentation, analysis of students' work and observation of twelve lessons.

## Design and Technology

The overall effectiveness of D&T was judged to be satisfactory.

## Achievement and standards

Students' attainment differs between the three material areas of D&T which are covered: in Food Technology it is above average but in Graphic Products and particularly Resistant Materials it is below average.

- In Graphic Products, year on year the number of students gaining a GCSE grade has been high. The number gaining A* to C grades was just above the national average in 2005 and 2006, but in 2007 it dipped to well below the national average. Many students did not achieve their targets and in consequence their progress was limited.
- In Resistant Materials, standards have been well below the national averages in the last three years although year on year students' achievement has been improving. In 2007, 42% of students gained an

A* to C grade in the GCSE examination compared with the national average of 59.6%. Although there was a slight improvement in the A* to C grade this was offset by the worsening overall pass rate at 92% compared with a national average of 97.1%. Many students did not achieve their targets and their achievement was barely satisfactory.

- In Food Technology, standards have been above national averages over the last three years. The 2007 results were well above the national averages both for the number of students passing as well as the numbers gaining A* to C grades. Students exceeded their targets so their progress was good.
- At Key Stage 3, students have experience of working in resistant materials, food and graphic products for equal amounts of time. Students study control technology and have a limited amount of opportunity to learn computer-aided designing in the time allocated to resistant materials, making this material area overloaded. Standards are high in food but only average in the two other areas. The assessment of students' attainment in the three areas is insufficiently coordinated to give students have a clear idea of their National Curriculum level and how well they are doing in the skills that are common to the different material areas.
- The experience that students gain in Years 7 to 9 does not prepare them adequately for GCSE courses in Graphic Products or Resistant Materials.

## Quality of teaching and learning of D&T

Overall the quality of teaching and learning is good.

- There are some very good and experienced teachers teaching design and technology and also some new and less experienced ones who are developing and improving their skills. The teaching seen was always at least satisfactory, much was good and some outstanding teaching was seen.
- In the best lessons, teachers are very well organised, have a very good understanding of both the content of their subject and of how to teach it. Learners have suitably challenging tasks set for them and these match their prior attainment well. Lessons proceed with pace and challenge. Students enjoy learning because the lessons are both rigorous and enjoyable. The management of students is very secure, all make good progress and for very many it is very good.
- Relationships are a strength, and the good-natured challenges set to students enable high standards to be met. Behaviour is exemplary.
- In the good lessons often the electronic white board is well used and high quality learning resources prepared by the teachers match the different needs of the students. Tasks are appropriate and all students get along well together and group work is encouraged. ICT is often effectively used in coursework and presentation is generally good. Homework is set regularly.

- In the more ordinary lessons teachers are less secure in their knowledge of the subject and in the details of the specifications of the GCSE examinations. Here, more difficult students are given too much leeway and although the class is managed satisfactorily, students only make sound rather than good progress.
- Assessment at Key Stage 3 is inconsistent because teachers do not sufficiently work together to form a coherent system that informs teachers' planning for progression and learners' targets for improvement.

## Quality of curriculum

The quality of the curriculum is satisfactory overall.

- In the first three years students follow separate courses in food studies, resistant materials and graphics. They make a toy with moving parts that introduces them to control and they have experience of making some simple circuits. They make products mainly in wood and plastics, with a limited experience of metals. In graphics, they make models, point of sale displays, packaging products and develop a good range of graphic skills to support the expression of their ideas. In food, they develop a clear idea of diet and healthy eating and make a very good range of products, evaluating these both individually at school and at home, as well as in groups.
- Students have only a limited understanding of structures, and modern and 'Smart' materials, as required. In consequence the National Curriculum is not completely covered.
- A unified approach to teaching in the three material areas is missing. Students do not develop sufficient understanding of the underlying principles of designing, making, testing and evaluating the products they have made. The teachers tightly control much of the work students' produce in Years 7 to 9, and the scope for creative design work is limited. This does not prepare students sufficiently in the skills of designing needed for GCSE courses, particularly in graphic products and resistant materials.
- At Key Stage 4, students are given a satisfactory choice of GCSE courses and a vocational course in catering.
- Students in every year speak warmly of their experiences in D&T. They enjoy the practical work and feel they learn through making useful products that they can take home. They like least of all the volume of writing required for their coursework.

## Leadership and management of D&T

Leadership at whole school level, and within the individual material areas of D&T is good but coordination between them is unsatisfactory.

- The school is committed to providing learning experiences of high quality. The recruitment of specialist teachers has been an issue. This has been resolved by using a wide and time consuming range of recruitment strategies including taking unqualified teachers from industry and training them, allowing teachers to transfer from other subjects into design and technology, using teachers who have appropriate skills part-time from art, and taking a teacher on the graduate training programme.
- Although the three subject areas individually plan and develop their work well they do not work sufficiently together. In consequence the curriculum and assessment are not coherent from the students' viewpoint. Stronger co-ordination is required.
- The environment for learning is poor and needs redevelopment, although plans are in train to make some improvements.
- The food rooms need hand-washing sinks to comply with hygiene regulations.

## Inclusion

Students work very well together in their class, in groups, in pairs and individually. They respect each other and their views. Students and staff work very well in partnership with each other.

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

- making the effectiveness of teaching more consistent so that, in the subject as a whole and in the three material areas, students achieve well, know how well they are doing and how to improve
- ensuring that the curriculum fully covers the programmes of study
- improving the opportunities for students to develop their designing skills
- co-ordinating the different areas of D&T more effectively to make the learning more coherent, efficient and rigorous.

I hope these observations are useful as you continue to develop D&T in the school.

A copy of this letter will be sent to your local authority and will be published on Ofsted's website. It will also be available to the team for your next institutional inspection.

Yours sincerely

Andrew Lyons
Additional Inspector