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Mrs J Taylor Vice Principal Samuel Whitbread Community College Shefford Road Shefford Bedfordshire SG17 5QS

Dear Mrs Taylor

# Ofsted 2011–12 subject survey inspection programme: design and technology (D&T)

Thank you for your hospitality and cooperation, and that of your staff and students, during my visit on 1 and 2 February 2012 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 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 observation of 11 lessons.

The overall effectiveness of D&T is satisfactory.

#### **Achievement in D&T**

Achievement in D&T is satisfactory.

- A trend of above average and improving attainment is established in Key Stage 4. Overall students make satisfactory progress but those with special educational needs and those studying the Engineering Diploma make good progress. However, students' current attainment and progress vary considerably in lessons, across key stages, courses and especially in Year 9 and at Key Stage 4 where few attain the highest levels. Gaps between the attainment of boys and girls in GCSE D&T courses are much closer than the national average but are not closing swiftly enough. Sixth form students' attainment and progress are better in A-level classes than at AS-level.
- Students' knowledge of health and safety requirements is good. They follow instructions and are very keen to undertake the practical aspects of

their courses, although opportunities for them to make decisions to inform their designing and planning are limited in some projects. Most students at Key Stage 4 and in the sixth form take responsibility for managing their coursework and meet deadlines.

### Quality of teaching in D&T

The quality of teaching in D&T is satisfactory.

- In all lessons students are engaged in tasks and sustain their concentration very well. They work sensibly and cooperatively together and are keen to do their best. Where teaching is good or better learning is well planned to develop students' knowledge and understanding of new concepts or to tackle gaps in their learning. In these lessons, teachers adapt their plans or adjust levels of support in the light of students' responses and this helps to accelerate their progress. However, students are not always appropriately challenged in all lessons. Planning is inconsistent and tends to focus too much on what students will do rather that what they should learn.
- Some sixth form students take design risks in their learning to increase the complexity of the electronic circuits they create. This leads to innovative ideas to change how a product might function. Generally, risk-taking and innovation is not supported enough in all lessons.
- Guidance and feedback to students about their work are frequent and detailed at Key Stage 4 and in the sixth form. Good practice in recording feedback points is established in textiles and electronic lessons but this is not a consistent feature across all courses.

#### Quality of the curriculum in D&T

The quality of the curriculum in D&T is satisfactory.

- The school's specialist focus on engineering, visits to industry and collaborative projects has a positive influence across most courses and aspects of the subject. Students enjoy the range and choice of courses at Key Stage 4; these meet their needs and many say that they surpass their expectations.
- Opportunities for students to learn about the properties of smart materials and to use them to design and make products are limited within the current schemes of work. Some of the activities taking place in the engineering diploma units, such as those involving the design of electronic circuits, are in need of updating so that they are more relevant to students and to modern applications. Students have some opportunities to work with a real client and this provides more rigour and challenge to the design process through the client's input and discussion. Too little of this takes place and weaker practice in the form of creating fictitious clients is widespread in schemes of work at Key Stages 3 and 4.

## Effectiveness of leadership and management in D&T

The effectiveness of leadership and management in D&T is satisfactory.

- Staff share a common aim to do their best for all students. This is reflected in their consistency in using criteria to guide their assessments and in the commitment they make to providing opportunities for students to enrich their learning through extra-curricular visits and events. Due attention is given to risk assessment and health and safety across all aspects of D&T.
- The school knows the strengths and weaknesses in courses and key stages. Senior leaders are questioning the inconsistencies in students' progress and teaching. However, the use of data and the features of good learning across all courses and key stages are not used sufficiently by subject leaders to quickly secure improvements in students' achievement.

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

- ensuring that subject leaders use data and share good practice more effectively between courses and key stages to eliminate inconsistencies in students' achievement
- ensuring that all students are appropriately challenged in all lessons and that planning is consistent in its focus on what students will learn
- modernising and increasing the challenge in designing and making by ensuring that all students have regular opportunities to work to the demands of real clients and undertake relevant projects that require them to use smart materials.

I hope that these observations are useful as you continue to develop D&T 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. A copy of this letter is also being sent to your local authority.

Yours sincerely

Gina White Her Majesty's Inspector