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Mrs E Nicholls Principal Ripley St Thomas Church of England High School Ashton road Lancaster LA1 4RS

Dear Mrs Nicholls

## Ofsted 2011–12 best practice survey: design and technology (D&T)

Thank you for your hospitality and cooperation, and that of your staff and students, during my visit on 5 and 6 July 2011 to look at your work in computer-aided design and manufacture (CAD/CAM) in design and technology.

The visit provided valuable information which will contribute to our publication about best practice. The publication will include case studies about individual providers. If your school is included as a case study, you will have an opportunity to comment before publication. Individual institutions will not be identified in the main text without their consent.

The evidence used to inform the judgements included: discussions with staff, students and employers; scrutiny of relevant documents; analysis of students' work; and observation of learning sessions.

Overall, Ripley St Thomas is outstanding at computer-aided design and manufacture in D&T.

## Features of best practice

- CAD/CAM makes a highly effective contribution to students' learning and is readily available to support designing and making. Students confidently use professional-standard software and manufacturing equipment, such as rapid prototyping machines. As a result, relevant vocational skills are exceptionally well advanced by the time they leave school.
- D&T is the best performing subject in the school and examination results are well above average. This is because senior leaders have made developments in D&T, including CAD/CAM, a top priority. Highly effective subject leadership with a clear long-term vision has ensured that CAD/CAM is successfully integrated into design project work. It is used very well with traditional machines and hand tools to extend students' understanding and

experience of materials and knowledge of current manufacturing processes.

- D&T teachers set a high standard by modelling best practice. For example, they demonstrate to students how to use CAD/CAM equipment successfully at the point of need and ensure that it is fully integrated with other design and make activities. This is part of a routine pattern where the D&T teachers share their excellent subject knowledge with students at every opportunity.
- The department consistently challenges students to think originally and create new, innovative products, such as early learning toys developed in Year 12 product design. Students work to fine tolerances and achieve a professional quality in the products that they make. They have an advanced understanding of modern and smart materials, electronics, systems and control and make exceptional use of CAD/CAM resources to stay up to date with developments in research and innovation.

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

maintaining and extending the use of CAD/CAM and the impact on the already well above average examination results. We considered the balance between the cost of maintaining CAD/CAM equipment and investing in new resources to stay up to date with developments.

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 will be sent to your local authority.

Yours sincerely

Paul Hancock Her Majesty's Inspector