

Meaningful Learning Experiences

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| Strategic Commitment | ✓ | Part of a careers initiative across Greater Manchester |
| Curriculum Provision | ✓ | Expert input for a design/create project in DT |
| Employer Partnerships | ✓ | Involving a one-man local architectural practice |
| Reflective Young People | ✓ | Resulting in improvements in students' work |
| Informed Career Choices | ✓ | Presenting an architect passionate about his profession |

Feedback from local architect helps improve practical work in year 9 Design & Technology

The current scheme of work for year 9 Design & Technology students at Broad Oak Sport College in Bury requires them to apply skills learned through the year by designing and creating a mobile phone stand, using laminated wood.

The 13-week programme started with learning about *'Introduction to project and design process'* and *'Design limitations – lamination, materials, size of phone'* and, towards the end, included *'Evaluation of phone stands – suggest and design modifications to improve phone stands'*.

Stephen Charles Architects is a one-man practice in Bury. Stephen provide information about how laminated wood had been used effectively in his own designs for buildings, explaining its architectural merits and physical properties.

Students were challenged: *'Have you got what it takes to come up with innovative ideas for designs using laminated wood? Stephen is interested to know how you get on with your classroom project and will give expert feedback on your work.'*

Photographs of the students near-completed work were sent to Stephen Charles, who recorded video clip comments that were shown in the classroom. As well as explaining how students might improve their work and make better use of the material, he talked passionately about his 35-year career in the profession since graduating as a qualified architect, having originally been inspired by reading a Ladybird book as a small child.

Benefits for the Students

- Impact assessments revealed that, in particular, the project had helped students *'Become more interested in learning new information and skills'* and *'Work well with others on projects.'*

The thing I am most proud of as a result of this experience is:

- *'My end product'*
- *'Making my phone stand'*
- *'How I didn't use any machinery and got good results'*

Benefits for the School

- The school’s careers strategy states that, *‘We have close ties with local industry and our students have the opportunity to visit local employers ...’* and this project provided an additional local employer contact.
- *‘I have some improved photos now that the students have actually finished their designs. Many of them have already acted upon the advice in the video and oiled their work.’*

Benefits for the Employer

Stephen Charles Architects is located a 10-minute drive from the school. Even so, the firm is a one-man practice and Stephen could not justify taking time out to be prepare a classroom presentation or visit the school. But the process allowed him to act as an expert adviser and professional inspiration to the year group of students.

Stephen Charles Architects



| Year 9 | Autumn term | Spring term | Summer term |
|--|---|-------------|-------------|
| ROTATION | Technology runs on a 13 week rotation so Autumn, Spring and Summer Term content is the same for each rotation. | | |
| Key content, Main learning objectives, Knowledge, Skills, Understanding, | <ul style="list-style-type: none"> • Introduction to project and design process • Design limitations – lamination, materials, size of phone • Writing a situation and brief • Mindmapping needs of users • Developing a simple specification • Type up design brief and spec, produce cover page for project • Analysing existing products using ACCESSFM EXT-Moodboard of Target Market • Drawing skills – isometric drawing and recap on orthographic projection EXT – Initial design ideas • Initial design ideas (overall design) • Develop ideas relating to the specification • Consider static or adjustable stands. • Initial design ideas for laminated parts of stand • Initial sketches using template sheets • Evaluate design ideas – self and peer evaluation • Explain preferred choice and develop design further • Model design idea using paper strips • Materials and Manufacturing processes – Research the materials you are using and how to laminate wood, the tools and processes involved • ERS – Sustainability – Produce a slide explaining the environmental issues relating to this project. • EXT – Produce 2D design drawing of your design • DRT SESSION – Look at the feedback you have been given by staff and peers and act upon the feedback. • Complete any outstanding design work • Initial workshop session – Health and Safety recap • Pupils to select and start to cut materials for laminating • Pupils to continue cutting and laminating materials • Pupils to complete cutting and lamination. • Start sanding fronts and developing stands • Pupils to complete phone stands. • Pupils to complete phone stands, applying finishes • Evaluation of phone stands – Use ACCESSFM to evaluate stands against specification • Evaluation of phone stands – Suggest and design modifications to improve phone stands • Final design drawings using 2D Design – compare and evaluate actual design against ideas • Packaging design – develop flat pack cardboard box for point of sale | | |
| Formal Assessments | <ul style="list-style-type: none"> • Self Assessment and review • Assessed presentation drawing task • Assessed computer based design portfolio • Assessed practical outcome using Lancashire Levels framework • Assessed extended homework tasks | | |



A local architect provided expert guidance for students as they worked through a project to design and make a mobile phone holder using laminated wood. Students saw how the material can be used in building designs and received feedback from the architect about their designs, giving them a chance to improve their work, as well as hear about the architect’s career.