

LEARNING EXPERIENCES – INTRODUCTION TO BUILDING MATERIALS

This template is designed to be generic to both exam boards

Title of scheme	Introduction to Building Materials				
Unit (s)	Unit 2	Level	2	Ref	2-03
Aim and objective	To start students considering the range of materials used in construction and the built environment, and why they are used in terms of aesthetics and structural properties (fit for purpose)				
Intended outcomes	A PowerPoint presentation showing a wide range of building materials. As this is an introductory learning experience, students could work in carefully selected small groups or pairs to create their presentation, and then make a verbal presentation to the class.				
Approximate duration	2 hours for the collection of photos (students could also do this as homework), plus another 2 hours for PP preparation.				
Applied learning opportunities	<p>In small groups tour the college, and locality taking photos of building materials in-situ and then put them into a PowerPoint presentation (create a template for them to use) that requires them to add their own thoughts and comments about what the material(s) is and whether or not they consider it/them (photos may show materials combined) to be 'fit for purpose' and if the design expression 'form follows function' applies or not.</p> <p>Students should not just focus on buildings but also other structures and street furniture/public landscaping.</p> <p>Ask the local builders merchant to talk to the students about their work.</p> <p>Ask a local architect to explain to the students how they use different materials to create a range of effects to differing purposes. They can also explain how materials affect the way we feel.</p> <p>Seek out a local building materials or component manufacture and see if you can arrange a visit to the works.</p> <p>Arrange a visit to a ready mixed concrete plant or a gravel pit to see how sand etc is mined, sorted and cleaned (sometimes both these operations are done in the same place).</p>				
Teaching tips	<p>To support the students work, practitioners will need to prepare a range of photos showing application of materials, and appropriate annotation (contact Link-Ed - for a PowerPoint presentation template on this). In addition, examples of the materials can be displayed in a suitable location within the college or school dept. Where possible they should be shown in-situ. eg. A cut-away or part of a structure.</p> <p>Give students a checklist of the materials they need to find. The lists of materials can be found in the relevant specification.</p> <p>Ask learners to question the suitability of the materials observed and where necessary get them to suggest alternatives.</p> <p>The verbal presentations could be done over several lessons as</p>				

	starters or plenary's. In this way, boredom of listening to repeated presentations is avoided.	
PLT's opportunities By referring to the specific PLT criteria under each heading, deliverers will find many opportunities to develop the learning potential.	Creative thinkers	Question their own and others assumptions
	Effective participants	Present a persuasive case for action
	Independent enquirers	
	Reflective learners	Communicate their learning in relevant ways for different audiences
	Self managers	
	Team workers	Show fairness and consideration to others
Resources and environment required	Digital camera per group ICT resources for downloading and presenting the photos. Location for presentation Contact the local timber, plumbers and builders merchants for samples of materials. Ask builders and trades persons for left over materials and components. Digital cameras + associated computers, software etc Template for students to complete (See separate file)	
Further learning opportunities	As this learning experience is designed as a starter activity, it naturally leads on to a more detailed study of this unit looking at the material properties, material failures and the development and use of sustainable materials.	
Assessment method, including peer and self assessment For further information regarding the exact spec criteria that can be met, please refer to separate schedule (to follow)	Peer assessment (Provide a checklist) – make it competitive – possible us of prizes. Ask an industry professional to judge the presentations	
Differentiation opportunities	The use of pre-taken photos The use of a template for presentation Set a theme, which would take the learners out of his/her normal comfort zone e.g. A church or other place of worship.	
Functional Skills connections	Maths	
	English	Present information and ideas clearly and persuasively.
	ICT use ICT systems
Homework opportunities	Expand the range of photos by continue to take photos around each learners home area or in the town centre etc	