ŁŁJONTRAINING

Campaigning for timber sector education, training and skills development

APPLIED LEARNING

Applied learning principles are key for architecture students, writes George Fereday, senior lecturer and technology co-ordinator at the CASS School of Architecture, London Metropolitan University



Architecture students working on a sweet chestnut lattice frame

In architectural education, there's a rich heritage of teaching the properties of materials and structural behaviour through a process of making.

The Bauhaus or "construction house" taught using applied learning principles between 1919-1933 and the tradition continues today at The CASS School of Architecture, referred to as the 'Aldgate Bauhaus.'

Every February, second year undergraduate architecture students spend a week off-campus on an urban 1:1 scale making workshop in order to learn valuable lessons about the weight, stiffness and workability of a range of natural construction materials.

Through experimentation and guided building exercises, the students learn intuitive lessons about the properties of natural materials, methods of processing and efficient structural assemblage. These are experiences that promote creative and adaptive thinking and enhance the collaborative mindset needed to work alongside structural engineers, suppliers and builders that students will work with in the future.

Last year there was a particular focus on sustainable sourcing of wood products, much of which was sponsored by industry (see box). By engaging with industry, the School of Architecture has begun to establish links with the same supply chain that our students will navigate once graduated and in focusing

on the sourcing and supply of materials, students gain confidence enquiring about certified timber products, chains of custody and the environmental burden of logistics that relate to any given construction site.

UK-grown timbers were also sourced for the workshop. Working closely with the Torry Hill Estate in Kent, coppiced sweet chestnut was supplied as a mixture of roundwood lengths and traditional cleft fencing pales. Chestnut was selected for its excellent timber durability, low sapwood content, relatively rapid harvest cycle and zero waste split green wood processing.

By researching timber construction precedents during and after the making event, some students also discovered the handful of exemplar buildings built in the UK that have made use of locally grown timber. Such buildings include the chestnut gridshell of the Woodland Enterprise Centre at Flimwell, by Feilden Clegg Bradley Architects, and the glulam chestnut framed Shorne Wood Visitor Centre by Lee Evans Partnership.

By exposing students to making with timber and providing space for independent research into innovative timber architecture, the intention is that students feel empowered to explore the untapped potential of timber in its many forms and the spatial, environmental and economic benefits that can come with local timber use.

FURTHER INFORMATION

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Supporting the Confederation of Timber Industries' (CTI) Skills & Education initiative

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