

## **PAL WEEK: LEARNING SUSTAINABLE DEVELOPMENT IN DESIGN & ENGINEERING**

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### **Abstract**

Institutional guidance highlights the wider qualitative aspects of sustainability, however these are largely ignored within engineering education in favour of quantitative methods. To encourage understanding of these aspects a course was developed as part of induction for BSc Design Engineering and MEng Engineering students. The one week course has been delivered to mixed groups of first and second year students since introduction in AY2010-11 and has evolved from examining “social usefulness” to include “material utilisation” and “future vision”. The one week assessed programme employs PBL and PAL methodologies to promote student engagement with the concepts of sustainable development. Each group is issued with a variation of the brief but with common underlying themes. The key to success has been the avoidance of didactic elements; students are expected to present their findings at daily presentations before a short micro-seminar and adaptation re-shapes their objectives. Students are not told who will be presenting for their group and no notes are allowed, ensuring all members know and understand the work done. Outputs have shaped how sustainable development is understood within the context of design engineering from a practical as well as educational perspective and resulted in a number of published works.