

Title: Remote laboratories – low-cost practical work and new pedagogical opportunities

Prof Timothy D Drysdale

Remote laboratories let students, staff, and visitors operate actual experimental hardware in real-time, via their web browser. Experiments can be installed in small unused spaces around campus, offering low-cost practical work at any time of the day, from almost any location in the world. The rich data stream flowing between users and experiments offers new pedagogical opportunities such as feedback on-demand. A key challenge is in developing a sustainable digital infrastructure that can deliver on the diverse and difficult requirements of mainstream adoption, whilst simultaneously addressing the need for co-development of technology and pedagogy.