Learning can be unexpected, informal, unplanned, serendipitous, or conditions and spaces can be explicitly designed to engage learners and create opportunities for learning (Barnett, 2011). Higher education research (Keppell, 2012; Oblinger, 2006; Savin-Baden, 2008) indicates that there is a relationship between learning spaces and how one teaches. This notion of “built pedagogy” (Oblinger, 2006) is explored in this paper, by evaluating the efficacy of a subject in the Graduate Certificate in University Learning and Teaching at Charles Sturt University, Australia. The aim of the subject is to provide opportunities for participants to consider how the design of learning spaces, technologies and assessments can support learning that is reflective of real-world problems, encourages the development of problem solving skills, is collaborative, and builds self reliance (MCEETYA, 2009). The subject assessment required participants to document the spaces in which they taught, discuss the types of learning that ‘could’ happen in that space and propose how the learning space and/or their pedagogy could be redesigned to more effectively engage their learners in deep understanding (Biggs & Tang, 2011) and accommodate the learning needs of 21st century learners (MCEETYA, 2009). Data were gathered using consenting participants’ assessment tasks from the subject as work samples, and analysed using the characteristics of 21st century learners as an analytical framework. The research results indicated that the subject had assisted participants to develop an awareness of and ability to create ‘active, social and experiential’ learning spaces to meet the needs of their 21st century learners.