

Embedding threshold concepts into first year design history: Can we transform students understanding?

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Meyer and Land (2005; Mayer, Land & Davies, 2006) in the field of economics ascertained that in order for economists to master their subject, understanding of certain concepts were required. They described these as 'threshold' concepts, stating that these had certain features in common, which included that they were: transformative, irreversible, integrative, bounded and troublesome. Mayer and Land have been criticized for failing to clearly "specify what is essential to a threshold concept" and neglecting "to explain what they understood a concept to be" (Rowbottom, 2007, p.264). There are differences of opinions on how to define a 'concept'. In cognitive science for example, concepts are viewed as word-like mental representations (Pinker, 1994). Perkins (2006) stated that "fundamentally, concepts function as categorisers" (p.41), whereas Dummett (1993) and Brandon (1994) put forward the view that concepts were abilities, an approach not usually advocated. This paper takes on the premise that in order for students to learn a 'threshold concept' in design history in higher education certain skills need to be developed and practiced before these concepts can be taught. Recent research has demonstrated that first year design students in general lack the visual literacy skills needed to identify key characteristics of historic design styles (Rourke & O'Connor, 2009a, 2009b) even after receiving instruction on the material to be learnt (Rourke & O'Connor, 2010). It shall be theorized whether the transformative concept which Meyer and Land (2006) suggested: "once understood, its potential effect...is to occasion a significant shift in the perception of a subject" (p.8) comes about as a result of grasping essential design history concepts or through developing visual literacy skills through the course material that provide transferable knowledge adaptable to other disciplinary areas. As Rowbottom (2007) suggested should "we look for abilities for which that concept is necessary" (p. 268). Specifically this paper will discuss the threshold concepts used to teach design history and debate whether acquiring visual literacy skills that have the potential of transforming the way one sees the world have become more important to the 21st century design student than obtaining concepts that have a border or limit where acquisition of specific disciplinary knowledge is a prerequisite for progression.

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