

## **PROFESSOR RAY LAND**

### **KEYNOTE ADDRESS PRESENTATION**

#### **TITLE: THRESHOLD CONCEPTS AND TROUBLESOME KNOWLEDGE: A TRANSFORMATIONAL APPROACH TO LEARNING**

This presentation will outline the Threshold Concepts Framework (TCF), a discipline-based and transformative model of learning which can be used as a conceptual tool and analytical framework to inform programme design, and spur educational research initiatives. Threshold Concepts can be considered akin to a portal, opening up a new and previously inaccessible way of thinking about something and leading the learner to new conceptual and affective terrain. Threshold Concepts represent a transformed way of understanding, without which the learner cannot progress, and invariably involve a shift in the learner's subjectivity. Threshold Concepts, it is argued, lead to a qualitatively different view of subject matter and, as the 'jewels in the curriculum', are central to the ways of thinking and practising within a discipline.

As a consequence of comprehending a threshold concept there is a transformed internal view of subject landscape, or even world view. This transformation may be sudden or protracted, with the transition to understanding often involving 'troublesome knowledge'. Depending on discipline and context, knowledge might be troublesome because it is ritualised, inert, conceptually difficult, alien or tacit, because it requires adopting an unfamiliar discourse, or perhaps because the learner remains 'defended', resisting the inevitable ontological shift that threshold concepts entail. Difficulty in understanding threshold concepts may leave the learner in a state of 'liminality', a suspended state or 'stuck place' in which understanding approximates to a kind of 'mimicry' or lack of authenticity. This session will explore how the framework might offer medical and health educators new perspectives in terms of how they design curricula, approach teaching and support learners. A searchable archive of thresholds research evidence across many disciplines is maintained at: <https://www.ee.ucl.ac.uk/~mflanaga/thresholds.html>

### **KEYNOTE WORKSHOP**

#### **TITLE: THE 'JEWELS IN THE CURRICULUM': USING THRESHOLD CONCEPTS AND TROUBLESOME KNOWLEDGE TO INFORM CURRICULUM DESIGN.**

This interactive workshop session will build upon ideas presented in Ray Land's keynote address and provide an opportunity for participants to explore further how the Threshold Concepts Framework (TCF) might be employed to inform and enhance curriculum and assessment design in medical and health programmes.

The session will suggest methods for identifying candidate threshold concepts within a discipline and explore participants' own experience and expertise to characterise the ways of thinking and practising (WTP) – the disciplinary modes of reasoning and explanation –

that medical and health educators consider to be fundamental to a grasp of their subject. It will examine what students tend to experience as 'conceptual bottlenecks' and which curriculum design interventions, or changes of mode, might aid mastery of these difficulties.

It will explore, further, the relationship between candidate threshold concepts in medical curricula and how these elements of the curriculum are typically taught, sequenced and assessed. What kinds of understandings, or misunderstandings, do student assignments or performances characteristically exhibit? Do students offer mimicked understandings rather than real mastery? In a time of risk and uncertainty what personal transitions and shifts in subjectivity must students of medicine and health face in the formation of professional identity? How may they be best supported through 'liminal' or stuck places?

One potential issue to be addressed is the role that TCs, as curriculum 'jewels', might play in streamlining content and modes of assessment. What areas of knowledge and conceptual issues currently appear to receive the most attention? Is the balance between content knowledge and conceptual mastery optimal, or might the curriculum be overstuffed?