A perspective on threshold concepts in Science and Engineering

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***Abstract**: The expanding conceptual framework of Threshold Concepts is grounded in a seminal paper by Meyer and Land (2003) which is available online at http://www.tla.ed.ac.uk/etl/docs/ETLreport4.pdf*

Threshold concepts are concepts which, when understood, lead to a new and previously inaccessible way of thinking about something; a transformed way of understanding, or interpreting, or viewing something without which the learner cannot progress. Such a transformation may represent aspects of how people 'think' in a particular discipline, and is likely to be irreversible. Threshold concepts are also likely to be, in particular, troublesome (counter intuitive, alien) and integrative (exposing the previously hidden interrelatedness of something; other concepts). It has been argued that threshold concepts provide a new lens through which to view variation in student learning; particularly within posited conceptually discrete states of liminality.

In his keynote Erik will introduce, and provide an overview of, the developing framework of Threshold Concepts and attendant research opportunities drawing on examples from Science and Engineering.