Definition of a Threshold Concept

> A threshold concept can be considered as akin to a portal, opening up a new and previously inaccessible way of thinking about something. It represents a transformed way of understanding, or interpreting, or viewing something without which the learner cannot progress. As a consequence of comprehending a threshold concept there may thus be a transformed internal view of subject matter, subject landscape, or even world view. This transformation may be sudden or it may be protracted over a considerable period of time, with the transition to understanding proving troublesome. Such a transformed view or landscape may represent how people 'think' in a particular discipline, or how they perceive, apprehend, or experience particular phenomena within that discipline (or more generally).
>
> (Meyer & Land, 2003, p. 412)

Reference

Meyer, J. H. F., & Land, R. (2003). Threshold concepts and troublesome knowledge: Linkages to ways of thinking and practising within the disciplines. In C. Rust (Ed.), *Improving student learning: Improving student learning theory and practice – 10 years on* (pp. 412-424). Oxford, UK: Oxford Centre for Staff and Learning Development.

Selected Resources

Web Site

The most comprehensive web site on threshold concepts is maintained by Mick Flanagan, University College London. Here, you'll find many disciplinary examples, links to articles, videos, and presentations: http://www.ee.ucl.ac.uk/~mflanaga/thresholds.html

Key Articles and Book Chapters

Meyer, J. H. F., & Land, R. (2003). Threshold concepts and troublesome knowledge: Linkages to ways of thinking and practising within the disciplines. In C. Rust (Ed.), *Improving student learning: Improving student learning theory and practice – 10 years on* (pp. 412-424). Oxford, UK: Oxford Centre for Staff and Learning Development.

Meyer, J. H. F., & Land, R. (2005). Threshold concepts and troublesome knowledge (2): Epistemological considerations and a conceptual framework for teaching and learning. *Higher Education, 49*, 373-388. doi: 10.1007/s10734-004-6779-5

Meyer, J.H.F., Land, R. & Davies, P. (2006) Implications of threshold concepts for course design and evaluation. In J.H.F. Meyer & R. Land (Eds.), *Overcoming barriers to student understanding* (pp. 195-206). Oxon, UK: Routledge,

Books

Land, R., Meyer, J. H. F., & Smith, J. (2008). *Threshold concepts within the disciplines*. Rotterdam, the Netherlands: Sense.

Meyer, J. H. F., & Land, R. (Eds.). (2006). *Overcoming barriers to student understanding*. Oxon, UK: Routledge.

Meyer, J. H. F., Land, R., & Baillie, C. (Eds.). (2010). *Threshold concepts and transformational learning*. Rotterdam, the Netherlands: Sense.

Threshold Concepts in Engineering

Male, S. (2012). *Engineering thresholds: An approach to curriculum renewal: Integrated Engineering Foundation Threshold Concept Inventory 2012.* An outcome report of the ALTC project "Engineering thresholds: an approach to curriculum development": http://www.ecm.uwa.edu.au/__data/assets/pdf_file/0018/2161107/Foundation-Engineering-Threshold-Concept-Inventory-120807.pdf

Male, S. (2012) *Engineering thresholds: An Approach to curriculum Renewal: Guide for Engineering educators on curriculum renewal using threshold concepts 2012.* An outcome report of the ALTC project "Engineering thresholds: an approach to curriculum development": http://www.ecm.uwa.edu.au/__data/assets/pdf_file/0009/2175750/Engineering-Thresholds-Guide-120830.pdf

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