

### ***Threshold concepts and their characteristics***

“Threshold concepts,” a term coined by researchers J.F. Meyer and Ray Land, are concepts that learners must see through and see with in order to progress within disciplines.

According to Meyer and Land, threshold concepts are:

- *Troublesome*: they create discomfort and resistance
- *Transformative*: they change the way students view the discipline and their own position in it
- *Integrative*: they bring together various facets of the discipline and breed a macro view of its work
- *Bounded and Discursive*: they breed new, named terms that are distinguished from common knowledge/language
- *Irreversible*: Once achieved, they are difficult to unlearn (and hence are transformative)
- *Liminal*: Learners move toward and away from threshold concepts as they grapple with them

Threshold concepts are generally characterized as *a way of thinking*, rather than a discrete body of knowledge. A shorthand way to think of this is to think: verb (action), rather than noun (thing). For instance:

- Writing is a subject of study and an activity (Writing Studies)
  - *disciplinary and professional identities are constructed through writing*
- History consists of multiple and competing narratives (History)

In virtually all disciplines, threshold concepts can vary *within subdisciplines*; however, these subdisciplinary concepts bear some relationship (close or distant) to broader concepts of the discipline. (For example: threshold concepts of history/threshold concepts of 19<sup>th</sup> century U.S. history/threshold concepts of economic history)

### ***Threshold concepts and learning: over time and across courses and disciplines***

Both faculty (experts) and learners (novices/novices moving toward expertise) engage with threshold concepts in different ways and at different levels depending on where they are in their engagement with the discipline.

- *Introductory learners* are considered successful and accomplished when they begin to see the subjects of disciplines in the same ways that those teaching them do.
- *As learners advance*, the expectation is they will begin to see and think in ways that are particular to disciplines or disciplinary groups: “like a historian,” “through literary lenses,” “as a scientist would.”

As learners move *across disciplines* – for example, when they go from course to course within a GE program – they are considered successful when they develop and act upon *metacognitive knowledge* associated with threshold concepts. This means:

- Recognizing that disciplines *have* threshold concepts;
- Recognizing *variation* among threshold concepts;
- Understanding that threshold concepts reflect and are reflected in *ways of approaching and representing knowledge* within and across disciplines; and
- Drawing on this metacognitive awareness as they move *among* disciplines.

(Please see diagram on reverse)

It is possible to locate faculty (expert)/learner (novice→expert) engagement with these different aspects of threshold concepts on a plot:

