

Threshold concepts: Shifting the focus from teaching to learning

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Question

What do threshold concepts add to Grad Certs? (that aim to develop learning and teaching understanding and practice of academics)?

Context

- Student Learning in HE – course within a Grad Cert in university learning and teaching
- Course focus on the development of academic's teaching and learning framework
- Environment critical - respect and trust
 - where reflection modeled and stories told
 - emotions discussed
 - choice offered - range of literature, able to approach task in their own way
 - High challenge; high support

Literature and workshop

- Focus on bringing 'students' from outside to inside the discipline/knowledge community
 - To consider disciplinary ways of thinking and being
 - make the discourse and tacit knowledge more explicit
 - To consider what it is to be an expert
 - to consider key learning (understanding)

Threshold concepts

Used at multiple levels - as a lens - to support participants to reflect critically:

- upon their own discipline and what their student's "need to know" - to shift focus from content to understanding - plus to what it means 'to be' within their discipline
- upon their own learning about learning and development as a teacher
 - ▮ upon their past experience, learning and teaching practice and
 - ▮ (possibly) reframing this

Used in conjunction with other ideas - literature that focuses on bringing students inside the discourse: Northedge (2003)

- ▮ Helping students frame meaning within a (new) discourse of learning and teaching
- ▮ Designing well-planned excursions into unfamiliar discursive terrain
- ▮ Creating intersubjectivity
 - “Establishing a common focus for some shared meaning making” (p173)

Pace and Middendorf (2004) 'Decoding the disciplines'

- Mental operations required of undergraduates differ enormously from discipline to discipline - these ways of thinking are rarely presented to students explicitly
- Takes advantage of differences in thinking among fields to decode each individual discipline.

Following the model:

- ▮ faculty answer a series of questions to define crucial bottlenecks to learning,
- ▮ dissect the ways an expert deals with the issues that causes the bottleneck, and
- ▮ invent ways to model this thinking for students

Tasks

- Explore readings
- Consider an area where your student's get stuck
- How do you as an expert do these things?
 - difficulty we face .. uniqueness of particular ways of posing and solving problems invisible to professionals
 - requires metacognition ... dissect your innate thinking
 - to do this you need to distance yourself from all that is natural and automatic to members of your field
- Aim - work with someone from a different subject area – **and** through interview - reconstruct the steps that you yourself do when approaching such an area

Assessment

- Critical reflection

“What do I see as the key insights/lessons about learning that might inform my practice as a teacher within my particular discipline?”

- underpinned by Brookfield’s 4 lenses framework

- Mixes autobiographical narrative and critical reflection with more traditional analysis and discussion genres

Brookfield's 4 lenses

Our autobiographies as
learners & teachers

Our colleagues'
experiences

Our students' eyes

Theoretical literature

What do we see?

- Draw from academic's reported experiences/ responses/outcomes and learning – across multiple levels
 - Workshop – during and after
 - Assessment
- Reveal levels of reflection - from considering thresholds in their own discipline, beginning to question ideas around learning to deep examination of their views/beliefs about learning and teaching – and themselves.

Threshold as a lens to view discipline

- Assessment reveals explorations of using thresholds in teaching within disciplines

“A key threshold concept in management education is seeing how the formal theory can be applied to reality. This requires not only an explicit appreciation of the economic concepts, but the ability to place them into their wider context. This concept is “transformative” letting the students understand the value of the discipline itself, “irreversible” in that this general understanding is unlikely to be lost, and “integrative” in the sense that it is the nexus of reality that places the often unconnected economic models into their relative context “(Academic in Business)

Reflections on the process of examining thresholds leads to an examination of the process of learning

“I think it’s true that once we’re “expert” that we forget how it was as a “novice” is very true. My partner and I had 2 completely different topics and threshold concepts, yet we realized that our approach could be the same. We actually came up with the approach together while discussing the first person’s topic and realized it also applied to the second person’s topic”

“....I tended to drop a lot of presumptions about what they know and break things down much more than what I may have done with students. It would have also been good to discuss with others within your own discipline”

Responses to task

Questioning of their own teaching....

“I presented my problem with student’s reaction for reflection and found the discussion useful. I was stuck at a later point on the session that one of the suggestions was about seeking true perspective (lens) of the students and asking them what the problem was – something that I had not considered and yet I regularly exonerate my students for not seeking the “other” perspective. How ironic! Something of an “aha” moment in itself.”

Discovering their own thresholds...

I just wanted to tell you that I really appreciated this workshop. It was difficult to squeeze in between all the rest, but it was worth while the effort. I found the concept of threshold quite challenging and did need substantial time to process it. I think the written assignment will definitely help in this process.

More concretely, I felt that after I did start opening up to it was much easier to explain what is happening to my honour students at this point. I think they are struggling to jump a gap, while at the same time not realizing that that is what an honours year is about, one more transformation.

Academic in arts

- Threshold – being able to put herself in student's shoes....

The liminality of student-centred learning.....

“The centring of student’s learning experiences at the heart of teaching practices is so important a shift in my own conception of what it is that is important in teaching that it constitutes, for me at least, a threshold concept.”

In my case as a learner – or more accurately as a learning teacher – the threshold concept of centring student’s learning to the core of my teaching practices does not come ‘naturally’ or easily..., And yet I understand enough of the concept of threshold concepts to also realise that it cannot be a return to ‘business as usual’. And so while the threshold concept of prioritising students’ learning over my own teaching seems to make perfect sense, on the face of it, it is something I feel I have only learnt superficially”

Academic from Geography – assessment task

Later...reflecting on the task

- Doing the assessment task was torture and I still feel like I have not really internalised or 'owned' the concept of student-centred learning. I really liked researching for it, CIS to students and interviewing my colleagues but what to write and whether what I was writing was appropriate was anybody's guess. I felt quite isolated during the writing process and pretty stupid
- My gain from the assessment task was an incapacity to forge ahead with teaching when students aren't learning. Quite a sea(see)-change!

Reflections on past learning...narratives about their (often negative) experiences of learning and insights from revisiting this

School netball was my Waterloo.... I struck one of those sports teachers who had the zeal of a Hitler Youth fanatic... I was given a rule book to learn by heart. Somehow, that was supposed to make me a player...It assumed knowledge I did not have. The terms, the jargon ... it could have been written in Greek for all the use it was. It was like an in joke that everyone but me knew, or a conversation I'd entered half way

So I stumbled through games with no idea what I was doing and a pathological hatred of the game which soon extended to all sports teachers and has never left me

- Not 'victory narratives' (Peseta 2007)

Promoting interaction....

- *Email directed to another participant:* I'm struggling with my assignment off and on at the moment and I've just come across my scribblings from the first workshop day about your concept of "the gap" . Unfortunately, that now seems a bit slippery as an idea and I'm not sure I've got it (all together now - is it a threshold concept?)
- I've written it as being "a leap of creativity to generate new ideas" - possibly with regard to learning outcomes and "active" vs "inert" knowledge in our discussion about adult learners
- *A response:* or is it leaping over the gap?? I had this written down to think about further - wondering whether it's a gap or a hurdle or perhaps it's a puddle that you have to jump around in for a while before you get the hang of the connection with the other side.... (email discussion following workshop)

Some reflections of my own....

Huge potential for educational development - through being a multi layered lens....and a mechanism to work respectfully together

- Highly regarded by academics – enjoy the intellectual challenge...though creates considerable uncertainty
- Shifts the focus - from teaching to learning, from content to understanding - where others have failed!

- puts academics in dialogue with others - academic developers, students and researchers (Cousin 2007)
- Provides conditions for intersubjectivity - shared meaning making - academics maintain their expertise/identity
- Promotes critical reflection - focus is about knowing but also about being
 - ▮ Examination of their underlying assumptions/beliefs
 - ▮ Offers a language academics can use to express their learning –honestly

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