Developing Valid Methods of Identifying Threshold Concepts in Various Disciplines: A Pilot Project in Composition Studies

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This presentation will begin to address the question of how to identify, validate, and address threshold concepts within an individual discipline (Meyer & Land, 2005). Within a disciplinary context, individual instructors often identify threshold concepts based on their knowledge of their students' interaction with the content. This means of identification reflects an assumption regarding accuracy, yet it often underlies what is present in the literature (Kiley & Wisker, 2009; Lucas & Mladenovic, 2007; Land, Cousin, Meyer & Davies, 2005). Moreover, research methods for identifying threshold concepts vary widely to include interviews, case studies, and other qualitative data (Land, 2006; Davies, 2005). While individual experience may be valid, from a disciplinary perspective, the question of full inclusion of both the teacher and student perceptions with regard to accuracy still needs to be addressed. Accurate identification remains an important question for general education courses, disciplinary courses and faculty development, in efforts to explore with faculty ways to address threshold concepts within the curriculum.

Our research posed the question, "What can an instructor gain from considering student viewpoints *and* the experiences of other faculty?" We are testing a method of disciplinary inquiry, using analysis of given circumstances, collecting data through multiple methods, and analyzing results in a systematic approach (Davies, 2003, 2005; Cousins, 2010).

As faculty developers, such a method could be extremely useful in helping a department examine and improve curriculum, work with instructors and graduate teaching assistants, and improve student learning. The study reported here focuses on one departmental sequence—a first semester composition and rhetoric course which is taught at a large research university in the Southern U.S. Future studies will expand to consider validity across disciplines.

This presentation will include a method of identifying disciplinary threshold concepts within a course by using input (surveys and interviews) from learners and instructors as well as analysis of instructional materials. Participants in this presentation will be introduced to our research process, presented with our findings, and engaged in dialogue about approaches to identifying threshold concepts.

What we did:

1. Created a research team of faculty developers and disciplinary instructors
2. Analyzed syllabi to identify concepts taught in a course
3. Surveyed students to identify their understanding and comfort level with these concepts
4. Surveyed faculty to identify their understanding of students' understanding and comfort level with these concepts
5. Interviewed a sample of students regarding difficult concepts and why they were found to be difficult
6. Conducted a faculty focus group
7. Analyzed all the results and compared student responses with instructor responses.

Purposes:

- Identify the break-down between what students think they can do and what they don't comfortably understand.
- Identify any discrepancies between faculty and student perceptions
- Engage our faculty development team in a first test of our method

Questions for Audience:

What are your thoughts about the validity of various methods for identifying threshold concepts? Can we identify one process to identify TCs? Ultimately, as we take this process across disciplines and examine construct validity, do you think this method will apply equally well across disciplines?

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