'Nudging' : Conceptual Threshold Crossing in Doctoral Learning Journeys (0256)

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Abstract

This paper is based on results from a research project which investigated how to identify and 'nudge' doctoral students' conceptual threshold crossing or 'learning leaps' in their learning journey. It explores and conceptualises the nature of doctoral learning and reveals the positive practices adopted by students and supervisors to facilitate students' learning leaps. The data is mainly drawn from interviews with 20 doctoral students and 21 doctoral supervisors from five different disciplines across four universities in the UK. The research identifies ways in which students overcame 'stuck places' and began to work at a more conceptual, critical and creative level in their learning journeys, and reveals how doctoral supervisors strategically enable these change to happen. The paper offers some examples of ways to develop 'learning leaps'.

Key words: doctoral learning; doctoral supervision; external examining; learning leaps; conceptual threshold crossing

Introduction

Work carried out with postgraduate research students and their supervisors in the National Teaching Fellowship Scheme project 'Doctoral Learning Journeys' (2007-10) and earlier and ongoing work by Margaret Kiley and Gina Wisker (2006, 2008, 2009a, 2009b) suggests that there are conceptual thresholds which postgraduate students can cross in their research and the writing and defence of the thesis. Most work on threshold concepts has been undertaken in relation to undergraduate student learning (Meyer & Land, 2003; 2005) as has most work on transformational learning and transitions (Ball, 1999; Cranton & Wright, 2008). Our work focuses on the learning journeys and conceptual threshold crossings of doctoral students. Conceptual thresholds represent generic stages in the transformation of understanding and the creation of meaning and knowledge. They share similar characteristics to threshold concepts in the disciplines i.e. they are moments which are troubling, and transformative, leading to irreversible ontological and epistemological change and developments.

Research methods

Our work on the Doctoral learning journeys project invites doctoral students to explore through journaling and interview both whether and where they have experienced 'stuck 'places (Wisker & Savin-Baden, 2009) and how they overcame them and if, where and how they have crossed conceptual thresholds to make 'learning leaps ' in their work. The project has mapped learning journeys of over 20 doctoral students in five disciplines and from 4 universities. Learning trajectories and key learning moments in their journeys are captured longitudinally through semi-structured interviews and journaling, designed to produce rich qualitative descriptions of student experiences of learning. The research is also involved interviews with 21 supervisors from the same disciplines to gain their perspectives on how students display conceptual threshold crossing and what strategies can be employed to 'nudge' this learning.

Findings

The interviews suggest that conceptual threshold crossing can take place at particular moments in the doctoral student's research journey, such as the development of a research question from a topic and interest; development and actioning of a conceptual framework (Trafford & Leshem 2009); writing the theoretical perspectives chapter; engaging in developing dialogues with supervisors and communities of peers acting as critical friends, and preparation for the examination and viva. There is evidence that conceptual threshold crossing could take in different forms and students could move from 'stuck' places through liminal spaces into new, more conceptual understandings. The impact of conceptual threshold crossing is closely related to students' experiences of profound ontological change which enables them to see the self, the world and knowledge construction differently. Epistemological understanding also develops considerably as students understand and engage in the research process, preparing to make an original contribution to knowledge. These changes indicate there is link between individual students' development, identity, and the metalearning which is a feature of working at doctoral level.

In addition to the student interviews, supervisors' understandings of conceptual threshold crossing were examined, in order to reveal in what ways this was related to students' individual projects or to the discipline. Interviews captured supervisors' perception of critical points in doctoral studies where students crossed conceptual thresholds and made 'learning leaps' to achieve more conceptual understandings of their research. There was a focus on the characteristics of these 'learning leaps'. The interviews reveal that there were particular supportive practices, communities and events which helped doctoral students to overcome 'stuck places' and make conceptual threshold crossings in their work to produce conceptual, critical and creative work worthy of a PhD (EdD, Prof Doc).

The term of 'nudging' has developed from our work, and it is used to identify the kind of strategies and practices which supervisors, the doctoral students, institutions and critical friend communities can usefully and effectively engage in. These strategies have been found to enable,

support, nurture and facilitate conceptual threshold crossings and the research and writing at an appropriate conceptual, critical and creative level for the candidate to produce work worthy of a doctorate. This paper will share the evidence of conceptual threshold crossings and 'nudging' activities and illustrate how effective such activities were in enabling doctoral students to progress and achieve success.

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