View metadata, citation and similar papers at core.ac.uk
brought to you by CORE
provided by University of Bedfordshire Repository

Campbell, A. and Norton, L. (2007) Learning, Teaching and Assessing in Higher Education: Developing Reflective Practice. Exeter, Learning Matters.

Cardiff University (2012) PALET - The Programme Approval Lean Electronic Toolkit Project. Available from: http://blogs.cf.ac.uk/palet/ [Accessed 31 May 2012]

COBE (2005) Action Research: A Guide for Associate Lecturers. Available from: http://www.open.ac.uk/cobe/docs/AR-Guide-final.pdf [Accessed 29 May 2012] Note: COBE = Centre for Outcomes-Based Education.

CRe8 (2008) The University's Curriculum Review for 2008 (CRe8). Available from: http://www.beds.ac.uk/learning/curriculum/structures/cre8 [Accessed 22 May 2012]

Earl-Slater, A. (2002) Critical appraisal of clinical trials – The superiority of action research? British Journal of Clinical Governance, 7(2) 132-135. ISSN 1466-4100

JISC (2011) Course-related information. Available from: http://jiscdesignstudio.pbworks.com/w/page/26070134/Course-related+information [Accessed 28 May 2012]

HEFCE (2012) Key Information Sets (KIS). Available from: http://www.hefce.ac.uk/whatwedo/lt/publicinfo/kis/ [Accessed 21 May 2012]

Norton, L.S. (2009) Action Research in Teaching and Learning – A Practical Guide to Conducting Pedagogical Research in Universities. London, Routledge.

Parker, P. (2011) 10 Tips for writing student facing documents, PREDICT project in City University London. Available from: https://files.pbworks.com/download/0i8MnRKKyU/jiscdesignstudio/44033678/PREDICT%20Tips%20for%20writing%20student%20facing%20documents.pdf [Accessed 30 May 2012]

QAA (2007) Quality Assurance Agency for Higher Education: subject benchmark statement – Computing [Internet]. Available from: http://www.qaa.ac.uk/Publications/InformationAndGuidance/Pages/Subject-benchmark-statement-Computing.aspx [Accessed 25 May 2012]

Nurturing the independent-thinking practitioner: using threshold concepts to transform undergraduate learning

Claire Monk, Elizabeth Cleaver, Christina Hyland, Graham Brotherton
Newman University College, Birmingham

Abstract

This article explores the experience of employing the theory of threshold concepts to curricular re-design to transform students' learning experiences. As part of our annual review in 2011, programme team members raised the concern that some graduates from our vocational-type degree programme – BA (Hons) Working with Children, Young People and Families – did not appear to develop the links between 'theory' and 'practice' as effectively as other graduates. Reflection on the three-year old degree programme, designed to provide a foundation for those wishing to move into, or study further, in areas such as family support and social work, revealed two areas for further consideration. First, the programme's modular format appeared to encourage students to view aspects of their studies as unconnected. Secondly, its original design had been premised on a series of 'need to know' areas of policy, theory and practice which had been added to over time, with little taken out. In short, the curriculum appeared to have become both 'stuffed' and fragmented and did not appear to provide the ideal platform from which to engage students in the development of the knowledge, skills and understanding for future professional practice. Using the theory of threshold concepts as our starting point, we were able to identify key themes, ideas and activities that we perceived to be central to nurturing and developing independent and employable practitioners. The following article recounts our journey towards curriculum change, detailing how programme threshold concepts were identified and how these were subsequently applied in curriculum re-design.

Key Words

Threshold concepts, vocational degrees, professional identity, curriculum design, undergraduate degrees, professional development.

Introduction

The BA (Hons) in Working with Children, Young People and Families (WCYPF) at Newman University College enrolled its first students in September 2007. After three years the programme team recognised that several themes were duplicated across modules and certain students were not grasping concepts (both academic and vocational) central to the programme's aims and ethos. To address this, a two-day review of all modules and learning outcomes was conducted, using threshold concepts as the structural and theoretical basis for remodelling.

This article briefly explores the theory of threshold concepts, linking this theory to learning and teaching practice and its potential to transform the student experience within and beyond higher education. It considers the case of one undergraduate programme, recounting how the teaching team reviewed its purpose

to identify and incorporate thresholds for learning with a view to re-focusing course structure and content and to nurturing students as employable, independent-thinking practitioners. The article outlines an action framework and key recommendations which it is hoped will encourage and enable others to identify how threshold concepts might be applied to their own programmes in order to enhance the student (and graduate and employer) experience.

Threshold Concepts as a tool for Curriculum Review and (Re)design

The theory of 'threshold concepts' was developed by Meyer and Land in the UK in 2003. They argue that academic disciplines have, at their centre, core concepts which are fundamental to students' learning and disciplinary identities. These concepts, however, may be troublesome for students to understand and, indeed, for teachers to teach (Male and Baillie, 2011; Entwistle, 2008). Yet, once they are fully grasped by the student, they have the potential to transform students' thinking-processes as they move through a 'conceptual gateway' (Davies and Mangan, 2007) or 'portal' (Entwistle, 2008) which has the potential to fundamentally change their thinking and understanding of a given phenomenon, concept or procedure. Meyer and Land (2003:1) state that a threshold concept 'represents a transformed way of understanding, or interpreting, or viewing something without which the learner cannot progress'. It is important to add, however, that students may cross these thresholds at different stages and times in their learning and may take different journeys (individual and group) across the learning thresholds.

Threshold concepts theory is now being applied across a range of disciplines to identify the 'troublesome aspects of disciplinary knowledge within transitions across conceptual thresholds' (Land et al 2008:xi). Baillie and Goodhew (2006:5) also note the importance of focusing not only on the concepts that students find difficult, but also the aspects of learning and the curriculum they enjoy as this may also 'unearth some of the blocks of understanding'. Tsang (2011) explains this as exposing the hidden curriculum: making the implicit, or taken for granted, explicit. This approach allows curricula to be re-designed in order to engage students and enable them to make transitions across these thresholds, and to develop a deeper and more meaningful understanding of the subject (Land, Meyer and Smith, 2008; Male and Baillie, 2011; Perkins, 2008). Of additional benefit to students is that the learning gained by passing through a threshold is irreversible and integrative, enabling students to make connections between the various components of their learning within the discipline and to broaden and deepen their understanding of a range of ideas, concepts and processes (see Entwistle, 2008; Male and Baillie, 2011).

Threshold Concepts in Practice

A variety of methods have been used to identify threshold concepts within subject areas. Male and Baillie (2011) adopted a primary research-based approach (involving interviews, focus groups and workshops with academics, postgraduate and undergraduate students) to their analysis of threshold concepts within engineering across a number of universities internationally. An initial long-list of threshold concepts was negotiated with stakeholders, and in order to map these to the curriculum the team identified 'three big ideas' on which to centre their revisions (Male and Baillie, 2011:255). Potential threshold concepts were then identified for each of these three ideas. Not only was the curriculum redesigned as a result of this process, but teaching spaces and approaches to teaching also became more interactive. Key to the success of this endeavour, they argue, is ensuring that stakeholders gain an understanding of threshold concept theory in order that they are fully involved and engaged in curriculum change.

A second approach is exemplified by Davies and Mangan's (2007) application of threshold concepts theory in the field of economics. The driver for their work was the identification, by employers, that economics students were graduating without having mastered some of the fundamental principles of economics. Once relevant threshold concepts had been identified, three types of student learning activity were developed to engage students in crossing key economics thresholds and were piloted in four universities in one academic year (Davies and Mangan, 2008). To evaluate these changes, evidence was gathered from staff evaluations, interviews with students plus feedback from the external evaluators and colleagues. Davies and Mangan note that student interviews were particularly useful in gaining feedback to their approach, as this led to them exploring ways to incorporate the identified threshold concepts into assessment which, as they acknowledge, 'is the main student driver' (2008:48).

Similar to Davies and Mangen's recognition that employers expect certain core skills and understanding from economics graduates, we argue that in health and social care and other allied professions, employers expect graduates to have initiative, to be able to think independently, to be able to work in a professional way, and to actively engage in changing their own and others' practice. This is supported by the findings of Tsang (2011) who, in applying threshold concepts theory to

the education of health professionals, recognised the importance of ensuring that any curricular changes engaged students in the process of learning to think for themselves and to apply learned principles of professional practice to their field of employment as 'evolving professionals' (Tsang, 2011:1). For Tsang 'professional socialization and professional development' (2011:3) are ideas and ways of being that students need to understand more clearly; the aspects of the hidden curriculum which cannot always be taught or assessed but which the students learn through (work-based) practice and other social and educational processes.

With these various insights in mind, we were keen to apply the theory of threshold concepts to our own undergraduate degree programme (WCYPF). At this stage it is useful to note that the programme draws on a range of cognate yet different academic disciplines (psychology, sociology, and social policy) while additionally having to respond in a timely manner to a wide ranging and rapidly changing policy context, with the aim of preparing students for work in a range of roles including family support workers, children's centre managers, teaching assistants, or for further study to become teachers or social workers. Our rationale and approach for this curricular redesign are outlined in further detail below.

Our Approach to Programme Change

After running the BA (Hons) WCYPF programme for four years, the team undertook a systematic review of its approach and content based on the team's experiences and observations, on external examiner and student feedback, all set within a rapidly changing policy context.

The review identified that due to the broad nature of the programme, it attracted a diversity of students with a range of target professional destinations. Although this was deemed to be a strength of the programme, the team recognised that it additionally led to a number of challenges. With no overarching professional body providing a framework for the curriculum and no single programme subject benchmark statement, the key themes, areas and policies to be taught and the key perspectives, skills and ideas to be prioritised needed to be drawn from a range of documents and considered carefully.

Moreover, in parallel with the diverse student body it attracts, it has become evident that some students on the programme are more able to articulate a rationale for choosing it. For these students, their lived experiences, and the desire to make some sense of these experiences, are central to their choice; they come ready to engage with complex issues and to challenge and change their world views. However, it is also clear that other students arrive expecting to be provided with clear cut answers that will tell them the 'rights' and 'wrongs' of working with children, young people and families.

Many students appear to begin the programme with established 'common sense' understandings of key issues and concepts, for example inequality, and can appear to be resistant to theories that challenge these. These positions usually begin to reveal themselves early on in the first year of study, as students encounter complex sociological concepts. Students are also required to engage with social policy and the implications for practice 'in the field' and importantly are invited (and challenged) to reflect on their own value positions and how these may be aligned with professional values. The reality of crossing a 'threshold' in this area can include seeing society through a different lens, which means potentially leaving old ways of 'knowing', 'seeing' and 'being' behind as different understandings are understood and adopted (Timmermans, 2010). This period of transition can be a painful and emotional experience, a state of being 'betwixt and between' (Boyd and Myers, 1988 cited in Timmermans, 2010:13), as students reorganise the way they make sense of their world. It can be a time of anxiety, but it can also be exhilarating as students begin to make sense of experiences.

On reflection we were aware that some students were getting 'stuck' at particular points during this transitional time, while others grasped the same concepts with apparent ease. We felt, as a team, that this was compounded by perceived 'disconnections' between programme modules (each viewed by students as isolated, rather than part of the connected programme) and by the fact that some students appeared to find the transitions between different levels of study (i.e. from the first to the second year of study and from the second to the third year of study) as more difficult than others. We are aware that this is not a unique situation, and almost certainly has some resonance with many working in Higher Education (see for example Land et al, 2006). However, as discussed above, a further factor which we felt compounded our situation was the fact that the programme is inherently interdisciplinary, drawing on a range of social science and related perspectives.

It was our recognition of some of the hidden assumptions that appeared to underpin student expectations, that exposed the need to identify and reflect on the hidden assumptions and expectations that

we, as lecturers, held about our subject area and our students. More importantly, we recognised the need to consider how these assumptions influenced our approach to teaching, to curriculum design and to assessment processes. Our assumptions, which were largely implicit, were clearly framing our responses to students, and were often of a 'paradigmatic' nature; for example, the belief that education has an inherently political nature, that adults should be self-directed learners, and that critical reflection is an 'intellectual function characteristic of adult life' (Brookfield, 1995:3). The need to reflect upon the mismatch between students' desire to be taught 'what' and a curriculum that is rooted in 'ways of knowing' (Timmermans, 2010) became clear.

Regular discussions had taken place prior to our decision to rethink the curriculum using threshold concepts, and we had explored as a team potential reasons for these disparities, possible strategies to break down barriers to learning and, importantly, how to offer appropriate levels of support to students as they move, at different speeds, through their learning journey. We had also become increasingly conscious of our curriculum becoming 'stuffed', exacerbated by a vast amount of policy change and the 'face' and shape of children's and young people's services in the public and voluntary sectors changing exponentially. The team had been feeling the pressure of a perceived need to include a continually expanding amount of information in taught sessions, and through increasingly lengthy reading lists.

It was through attending an Introduction to Threshold Concepts staff development session that we felt finally that a clear structural and theoretical basis for a remodelling of the programme, which addressed all of the issues identified above, could be found.

The Remodelling Process

The remodelling process included a review of all modules, learning outcomes and modes of assessment initiated during two intensive team 'away days'. One of the key challenges for the team has been to agree threshold concepts at different points in the programme, and to reach a shared understanding of how crossing these thresholds are best facilitated in the curriculum. Pedagogical understandings have been at the heart of the review as the team have worked to reach a shared understanding of central concepts, with noted concerns that over simplification of complex ideas and concepts may lead students to gain naive and under-considered understandings (see Meyer and Shanahan, 2003, cited in Land et al, 2006:203). We have identified those transformative approaches to learning need to be rooted in ontological shifts, and agree with Meyer and Land (2005) that these shifts may be limited by the very nature of a three year degree programme that is constrained by time and validation requirements. This review process has left the team with a conviction that they would, in the words of Perkins (2008:13), have to 'rock the boat' in an effort to 'rebalance' it.

Key to our work has been a recognition that 'Working with Children, Young People and Families' as a subject area involves looking at and trying to understand the way that society structures itself, and the potential implications of this on the lives of individuals, families and their communities. In principle, we aim to work with students as 'co-constructors' of knowledge, and are largely resistant to didactic approaches, aiming to work in the spirit of Freire's (1970) theory of 'dialogic education'. However, the power dynamics involved in teaching in Higher Education are complex, and we have found that students are likely to challenge this philosophy, seeing lecturers as the 'experts' with a clear demarcation of roles (see Brookfield, 1995). Notwithstanding these limitations, we aspire to encourage deeper learning and that requires us to teach in a way that makes the subject matter explicit. This means eliciting active responses from students, building on what they already know whilst challenging student misconceptions and misunderstandings (Biggs, 2003:17).

These programme starting points were central to our identification and development of our first set of threshold concepts: the 'big ideas' at the centre of the programme that we believe are crucial if students are to graduate from our programme as 'evolving professionals' (Tsang, 2011) and as independent-thinking learners and practitioners. The articulation of these themes allowed the team to work on tightening the focus of the curriculum, the learning outcomes and assessment processes with the aim of improving student understanding and engagement.

Three 'big ideas' were identified: first, the notion of the evolving critical practitioner; secondly, an understanding of the need for professional identities and values (which may be different to, and held in parallel with, personal identities and values); and finally, the importance of linking theory, policy and practice. The articulation of these 'big ideas' begins to make the implicit (our understandings and assumptions) explicit to students and to set the foundation for the more focused themes and threshold concepts that are encountered across the programme.

Given the changing face of Children's Services, and the UK Government drive to increase joined-up cross-agency working, the need to understand professional values and identities is crucial. As well as 'how' to work

together, students additionally need to be able to grasp the perspectives (political, philosophical) of practitioners within different fields (e.g the medical practitioner versus the social worker). Before they can understand this, however, they need fully to grasp and understand their own identity (values, experiences, judgements). This links both to the concept of the evolving critical practitioner with a clear understanding of professional identities and values. In order to progress professionally and emotionally, prospective practitioners need to understand how they can reflect on their practice and how they can interpret their actions (and those of their colleagues) in order to improve practice of working with children, young people and families. Similarly linked to this is the notion of critical analysis. Students very often in their reading and research take at face value what they are reading without questioning the origins of the work. This is particularly the case with interpreting policy. One aim of generating critical practitioners is to ensure that graduates are able to interpret, question, critique, and analyse practice and policy documents.

Finally, the importance of linking theory, policy and practice was deemed to be of central importance. Our experience showed that students struggle to apply theory and policy to real-life examples, or to the workplace. Similarly, they find it difficult to integrate theory/knowledge introduced in one module with other modules. In short, the stuffed and modularised curriculum appeared to be encouraging students to compartmentalise their studies and their practice in unhelpful ways. In speaking with students and marking their assignments, we felt that this was leading students to mimic their understanding of these connections in their assignments.

The articulation of the three themes allowed us to work on tightening the focus of the curriculum, the learning outcomes and assessment processes with the aim of improving student understanding and engagement.

What Happened Next?

In line with the recommendations of Male and Ballie (2011), once our concepts and curriculum had been reconfigured, the next key step was communication with our students around the purpose of the programme, the thresholds to be crossed and the team's expectations of the students. This took a number of forms, each of which is discussed in further detail below.

First, an extended period of subject specific induction was developed at the beginning of the first year (in addition to the institution's generic induction period). The extended induction had three key aims: first, we wished to introduce some of the approaches at the heart of participative and active learning. Second, we wanted to be explicit about staff expectations of student learning behaviour and to explore students' expectations and assumptions about learning; finally we needed to communicate the 'big ideas' that underpin the programme: to 'name that which is un-named' (Brockbank and McGill, 1998:61). These three aims were interwoven into introductory sessions of first year modules. For example, students were able to begin to explore their identity and values as new and expectant practitioners; they were offered an introduction to the political values which would underpin the programme, and they were introduced to the notion and practice of independent learning. These ideas will be developed further when we devise the second year induction over the summer of 2012. The first year extended induction appeared to work extremely well for full-time students but proved more problematic for part-time students who had fewer timetabled sessions, and which limited the level of additional input they could receive at this stage in the year; an issue that we will be exploring further as a team prior to the next academic year.

To accompany the extended induction, a student narrative booklet has been produced which clearly outlines the proposed journey from undergraduate learner to independent-thinking practitioner. This stipulates the key messages given in the extended induction in order to reinforce the points. As the introduction states 'this booklet is designed to provide a guide to the key ideas behind the way the course is structured and to show you the thinking that lies behind what we teach and when we teach it. It will give you an idea about what to expect in each year and how we build on each year's learning to take you on your academic journey'. The booklet was well received by first year students. In addition, the booklet has been distributed at open evenings, providing prospective students and their parents with a greater sense of the programme's aims and purpose. The booklet additionally conveys a sense of the learning environment and the learning experience that we actively nurture too.

Unintended outcomes

The process of applying threshold concepts to the WCYPF curriculum was facilitated by the institution's Learning Development Unit (LDU). In an evaluation of this facilitative work, the Head of the LDU asked members of the WCYPF team to reflect on our own experiences of the process. Interestingly, colleagues from the team (ourselves included) identified that they had crossed our own personal development threshold during the process. An excerpt from these reflections is included below:

I can only speak for myself, but grasping the idea of threshold concepts has been… liberating. It has helped me to understand, and articulate, what some of my own frustrations [with the programme] were as well as providing a framework for moving beyond these... I now feel able to off load surplus content and take a more concentrated approach to teaching which provides the space and energy to engage with students in a more meaningful way; to actually spend some quality time on key issues rather than trying to speed through enormous amounts of information… Making the implicit explicit has been very helpful in the way that we engage with students.

Next Steps

Twelve months have passed since we started applying threshold concepts as a remodelling tool, and the process is still in its infancy. There are several short-, medium- and long-term steps to be taken. In the short term, a review of first year assessments and marks awarded will be carried out in order to compare and contrast these with previous first year marks. We hope to use this as one measure which can help us to identify the impact of the extended induction. We recognise that this relationship is not straightforward, however, and other factors will need to be considered, such as a change in entry level requirements and a potential 'cohort' effect. In addition, as current first year students move to second year, a second induction will be conducted in order to bridge the gap between years of study and to help to improve student retention.

A longer term step will be programme revalidation. This will enable the team to review the threshold concepts approach and identify whether the original threshold concepts remain applicable in the changing policy context and continue to meet the student learning needs.

Concluding Comments

Our own experience of translating the theory of threshold concepts into practice showed immediate benefits for both the teaching team and our current and prospective learners. It has enabled a constructive dialogue to take place between staff and students within our disciplinary area. Through enabling students to cross thresholds of understanding we are confident that we have begun to engage them in an active process of professional development towards independent-thinking practitioners who are better equipped for their professional field and to engage with continuing professional development.

References

Baillie, C. and Goodhew, P. (2006) 'Threshold Concepts in Engineering Education –Exploring Potential Blocks in Student Understanding' in the International Journal of Engineering Vol 22, No. 1. Available: http://ccphp.liv.ac.uk/php/terminal-4/media/livacuk/engineering/learningteaching/Threshold%20concepts%20p.pdf [accessed 4th April 2012]

Biggs, J (2003) Teaching for Quality Learning at University. 2nd Ed. Maidenhead: SRHE/OUP.

Brockbank, A and McGill, I (1998) Facilitating Reflective Learning in Higher Education Buckingham: SRHE and Open University Press

Brookfield, S.D. (1995) Becoming a Critically Reflective Teacher San Francisco: Jossey-Bass

Davies, P. and Mangan, J. (2007) 'Threshold Concepts and the integration of understanding in economics' Studies in Higher Education Vol 32, No.6, pp711-726

Davies, P. and Mangan, J. (2008) 'Embedding Threshold Concepts: From Theory to Pedagogical Principles to Learning Activities' in Land, R., Meyer J. and Smith, J. (Eds) Threshold Concepts within the Disciplines. Rotterdam: Sense Publishers.

Entwistle, Noel (2008) 'Threshold Concepts and Transformative Ways of Thinking within Research into Higher Education' in Land, R., Meyer J., and Smith, J. (Eds) Threshold Concepts within the Disciplines. Rotterdam: Sense Publishers.

Freire, P. (1970) Pedagogy of the Oppressed London: Penguin

Land, R., Cousins, G., Meyer, J. and Davies, P (2006) 'Conclusion: Implications of threshold concepts for course design and evaluation' in Meyer, J. & Land, R. (Eds) Overcoming Barriers to Student Understanding: Threshold Concepts and Troublesome Knowledge. London and New York : Routledge pp. 193-206

Land, R., Meyer J. and Smith, J. (Eds) (2008) Threshold Concepts within the Disciplines. Rotterdam: Sense Publishers

Male, S. and Baillie, C. (2011) 'Engineering Threshold Concepts' in 1st World Engineering Education Flash Week, Lisbon 2011. Available: http://www.sefi.be/wp-content/papers2011/T7/24.pdf [accessed 4th April 2012].

Meyer, J. and Land, R. (2003) 'Threshold Concepts and Troublesome Knowledge: Linkages to Ways of Thinking and Practising within the Disciplines'. ETL Project Occasional Report 4. Edinburgh: University of Edinburgh. Available: http://www.etl.tla.ed.ac.uk/docs/ETLreport4.pdf [date accessed 3rd April 2012].

Meyer, J. and Land, R. (2005). Threshold concepts and troublesome knowledge (2): epistemological considerations and a conceptual framework for teaching and learning, Higher Education, 49, pp. 373-388.

Perkins, D. (2008) 'Beyond Understanding' in Land, R., Meyer J., and Smith, J. (Eds) Threshold Concepts within the Disciplines. Rotterdam: Sense Publishers

Timmermans, J. (2010) Changing Our Minds The Developmental Potential of Threshold Concepts in Meyer, J. Land, R and Baillie, C (Eds) Threshold Concepts and Transformational Learning Rotterdam: Sense Publishers

Tsang, A. (2011) 'Students as Evolving Professionals: Turning the Hidden Curriculum around through the threshold concept pedagogy' in Transformative Dialogues: Teaching and Learning Journal Vol 4, Issue 3. Available: http://espace.library.uq.edu.au/eserv/UQ:241413/tsang2011.pdf [date accessed 3rd April 2012]