The troublesome epistemological and ontological students’ journey towards becoming researchers at undergraduate level

Abbreviated running head: The troublesome undergraduate journey towards becoming a researcher

ABSTRACT

This article documents the troublesome research journey of second year undergraduate students reading English at Coventry University (UK) between academic years 2007-2010. It reports the outcomes of the evaluation of the curricular interventions carried out in academic years 2008-2009 and 2009-2010 to address the issues identified in 2007-2008. It discusses the challenges that students face when engaging in the process of becoming researchers to plan for their final year dissertation and illustrates the curricular changes that were implemented to make this troublesome journey less daunting.

The article positions itself within the relatively new field of transactional curriculum inquiry known as ‘threshold concepts’ that aims at identifying subject-specific troublesome knowledge in order to put in place curricular actions aimed at improving student understanding. Following on from a previous study on the identification of a threshold concept in grammar analysis, it surmises that a new subject specific threshold concept is emerging. It proposes that its understanding also requires the grasping of generic concepts that appear to be fundamental across all disciplines.

KEYWORDS: Undergraduate students, research, threshold concept, becoming a researcher, text, English, curriculum, troublesome, epistemological, ontological

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INTRODUCTION

The trouble with English is that there are no answers. There are only evaluations and critical judgments backed up with evidence and strong argument. The ability to make a case through reasons, logical argument, and the ability to marshal evidence and to read widely in supporting literature is crucial. (English Professor, quoted in Donald, 2002:1)

I don’t want to argue

(English Degree student, dissertation tutorial, quoted in Orsini-Jones, 2010:253-254)

The above quotations illustrate the type of discrepancy that can occur when dealing with subject-specific troublesome knowledge. The student’s words highlight that engaging in the discourse of research in English Studies can present problematic issues that are both of an epistemological nature - incorrect link to the semantic field of ‘arguing’ in a daily context, rather than in its academic one - and
of an ontological one - resistance to engage with change, with new concepts, stressed by the lapidary negative statement.

These tensions were encountered when I implemented a curricular intervention aimed at helping students with ‘becoming researchers’. In keeping with recommendations on the ‘research-teaching’ nexus in tertiary educational literature (e.g. Healey, 2005; Wisker 2009) a second year module was designed at Coventry University - *Dissertation Methods and Approaches* - that aimed at equipping students with the ‘armoury’, to put it in Perkins’ words, of research skills necessary to complete their final year dissertation independently. In the process of delivering the module in its first year (2007-2008), I was taken aback by the levels of anxiety expressed by the students with reference to their engagement with the planning of their independent piece of research. This triggered an investigation into the issues encountered by the students on the module and in a cycle of curricular action-research interventions aimed at ‘easing’ the transition from student to independent researcher.

As previously discussed (Orsini-Jones, 2010: 349), other researchers have investigated troublesome concepts related to ‘becoming a researcher’ at postgraduate level (e.g. Kiley and Wisker, 2006; Wisker, Kiley and Aiston, 2006; Trafford, 2008; Kiley and Wisker, 2010) and taxonomies of undergraduate research skills have been designed following the identification of troublesome research knowledge (e.g. Willison and Remenda, 2008; Willison and O’Regan, 2006). The distinctive features of this work are that it tries to identify threshold concepts at undergraduate level that relate to ‘being an undergraduate researcher in English Studies’.

The use of the expression ‘troublesome knowledge’ derives from the field of educational enquiry known as ‘threshold concepts’ (Cousin, 2009: 201-212) and developed by Erik Meyer and Ray Land (Meyer and Land, 2003; 2005 and 2006; Meyer, Land and Smith, 2008; Meyer, Land and Baillie, 2010). Land, Meyer and Smith (2008: ix-xxi) suggest that the identification of threshold concepts allows tutors to put in place targeted curricular interventions aiming at enhancing the students’ learning experience and making such ‘troublesome knowledge’ less troublesome.
The major characteristics of a ‘threshold concept’ are that it is (Meyer and Land, 2003, 2005 and 2006):

- Troublesome: the learners will often find it problematic;
- Transformative: once understood, its potential effect on student learning and behaviour is to occasion a significant shift in the perception of a subject;
- Integrative: It exposes the previously hidden interrelatedness of concepts that were not previously seen as linked;
- Irreversible: the change of perspective occasioned by acquisition of a threshold concept is unlikely to be forgotten.

Meyer and Land also stress that assessment design plays a vital role in the identification and addressing of threshold concepts (Meyer, Land and Baillie, 2010: xvii). The assessment for module Dissertation Methods and Approaches was therefore tailor-made to address barriers to student understanding, while at the same time providing students with a ‘discursive platform’ where troublesome knowledge could be shared and discussed in order to be understood. The dialogue amongst students and between students and staff was supported by the use of the various relevant tools in the e-portfolio PebblePad, chosen as the e-platform to be used by students to share and discuss their ‘research artifacts’ and to engage in ‘meta-cognition’.

MODULE DISSERTATION METHODS AND APPROACHES

Curriculum design to facilitate the transition ‘from students to scholars’

The creation of the new degree course in English that was launched in academic year 2006-2007 offered staff in the English and Languages Department at Coventry University the opportunity to design an inquiry-based course. The curriculum design was underpinned by modules that aimed to encourage students to engage with scholarship and experience research at first hand, mirroring the right-hand side of the ‘Curriculum design and research-teaching nexus’ model proposed by Healey (2005:70; also in Jenkins and Healey, 2008) emphasizing a stress on research processes and problems rather than focusing on research content input.
Although the research-teaching nexus ethos permeates the whole of the curriculum, three modules in particular were designed to focus on its active development: Academic and Professional Methods and Approaches at level 1, Dissertation Methods and Approaches at level 2 and Dissertation at level 3.

The focus of this study is the level 2 mandatory (compulsory) module Dissertation Methods and Approaches that builds on the students’ experience of scholarly practice at level 1 and takes it further. It counts for 10 credits out of 120 on the students’ second year programme and ran for the first time in the second term of year 2 in academic year 2007-2008. It aims to develop independent research management skills in undergraduates and encourages students to engage in inquiry-based learning while at the same time preparing them to deliver a project plan and defend it in a professional way. At Coventry University all modules must report their intended learning outcomes. These are reproduced below, even if their value is debatable in terms of threshold concept discussion as highlighted by Land and Meyer: ‘A one-size-fits-all statement of intended learning outcomes will simply not work’, as there are individual differences in the positioning of students towards troublesome knowledge (2010:66). Nevertheless, at institutional level, we still operate within Biggs’s framework of
‘constructive alignment’ (2003) and the module learning outcomes are that, on its completion, students should be able to:

- Construct a viable research design plan for a dissertation
- Apply their understanding of qualitative and quantitative methods in the research design
- Retrieve, analyse and evaluate materials from a number of different sources for both academic and professional purposes
- Present their research plan to tutor/peers both orally and as a PebblePad webfolio, reflect upon the feedback received and comment on their peers’ plans (Module Information Directory 2008)

Although it was necessary to work within the deterministic constraints of the ‘learning outcomes’ framework, assessment design was carefully thought out to try and address students’ individual ‘modes of variation’ (Meyer, Land and Davies 2009: 68), i.e.: *subliminal* (a learner’s tacit understanding of an underlying game); *preliminal* (when the understanding of a concept ‘comes into view’); *liminal* (the oscillation around the portal of the threshold concept) and *postliminal* (the transformative horizon beyond the portal, the integrative and bounded world of new knowledge irreversibly acquired). The module is assessed via two pieces of coursework. The first one is an individual presentation of a dissertation research plan - 40% of the module mark, that is assessed by the individual student (self assessment), the tutors (both generic feedback after the presentation and more detailed individual tutorial) and the peers (who provide anonymous feedback on it after its delivery: see Appendix 1). The plan outline for the presentation must be set up as a webfolio in the e-portfolio PebblePad. The students are encouraged to use the e-portfolio PebblePad to support a meta-cognitive approach (Flavell 1979) as the system provides various structured entry forms designed to accommodate the recording of a range of skills, experiences and reflections (PebblePad - Pebble Learning, 2005).

This choice was also informed by the need to enable all students and staff involved to have a ‘sharable’ research plan, a learning object that would be available both for the duration of the module in 2007-2008 and also subsequently, in 2008-2009, so that the ‘ripples’ of the students’ work (and the staff and students’ comments on their work) could reach into the next academic year and inform the students’ subsequent research choices in a constructivist way. Previous cycles of curricular action-research interventions had been carried out that had demonstrated that sharing knowledge construction with the
dedicated e-portfolio PebblePad tools such as the webfolio and the action plans had helped students with understanding difficult grammar concepts (Orsini-Jones and Sinclair, 2008). It was felt that the use of personalised action plans would allow for the more ‘nuanced’ approach to assessment advocated by Land and Meyer (2010:63). Having the students’ action plans in e-format also had the added advantage of providing written documentation of the transformative nature of their journey towards ‘becoming researchers’. Each action plan illustrated a changing and evolving discourse, highlighting both places where students were becoming ‘stuck’ and triggers that had helped them with understanding troublesome knowledge.

The second assessed task (60% of the module mark) builds on the first one and consists of a research proposal for the dissertation. It also includes a ‘Reflective report on research-based Personal Development Planning ’ (see Appendix 2, Tasks descriptors).

Encouraging the students to engage in the peer-assessment of each-other’s individual presentations and webfolios was introduced to promote the sharing of their work with their ‘community of practice’ (as used by Wenger 1998). The tasks were designed and re-designed following an analysis of the students’ feedback and consideration was given to (in Land and Meyer’s words, Land and Meyer, 2010:61-62):

How might we construct a meaningful assessment process for students for whom, in many instances, what is to be assessed lies outside their prior knowledge and experience, or beyond their ontological horizon? How might we get away from traditional assessment regimes in which students can produce the ‘right’ answer while retaining fundamental misconceptions? How might a more dynamic approach to assessment, rather than a ‘snapshot’ approach, be practically achieved? How might the ontological shift required by threshold concepts be purposefully represented through assessment processes? Can assessment be optimized by employing threshold concepts as the focus of assessment at programme level?
This work started as a reflective evaluation of the students’ experience on the new module *Dissertation Methods and Approaches* in its first year of delivery (2007-2008) and developed into a cycle of action research informed by threshold concept theories following what could be called a ‘critical incident’ (Fry, Ketteridge and Marshall, 2009: 477-478). The students’ average for the presentation task (coursework one) and the pass rate in academic year 2007-2008 were below what was expected for a level 2 module (50% and 77% respectively) (Orsini-Jones, 2009: 11-12). The investigation into why this had occurred despite the careful pedagogical thinking underlying the syllabus design, developed into an ongoing curricular intervention addressing the issues identified. A total of 203 students, between 18 and 45 years of age, were involved in the three years. The evaluation is based upon data that is both qualitative and quantitative. The qualitative data consisted of:

- The analysis of the queries that students posted in the module web of the Virtual Learning Environment Blackboard (both in module mail and in discussions).
- The observation of the assessed individual presentations and the analysis of the reflective action plans that students wrote and posted in the e-portfolio *PebblePAD* before and after their presentations (normally one formative and one summative).
- The analysis of the written comments posted by students on their peers’ webfolios.
- The semi-structured interviews carried out with a self-selected group of final-year students in November 2008 – after the module had finished and at the beginning of their ‘dissertation journey’.
- The open statement feedback provided by students in the anonymous online module evaluation questionnaires created using the assessment/survey tool in the VLE and standard for all modules at Coventry University (14/42 returns in 2007-2008; 31/67 returns in 2008-2009; in 2009-2010 there were 57/94 returns when the paper evaluation was reintroduced due to the lower return rates with the online questionnaires).
- The feedback provided to the module leader by the 3 colleagues who moderated the task.
- The feedback provided at Course Consultative Committees, a forum for students to comment on their course to their lecturers.
• The external examiner’s reports.

While the quantitative data consisted of:

• The analysis of the marks obtained by students for the two pieces of coursework (the presentation of the webfolios and the project plans).
• The comparison between the marks obtained in each of the academic year under investigation.
• The analysis of the numerical section of the student evaluation questionnaire.

The semi-structured interviews carried out with students in November 2008 to investigate the problematic issues raised by the critical incident and by the students’ feedback were carried out in adherence with both the British Educational Research Association and the Coventry University ethics guidelines with students who had completed the module.

THE TROUBLE WITH RESEARCH

Phase 1: 2007-2008- what’s the problem?

Many students identified positive aspects about the module in their feedback in 2007-2008. They stated that they had found it interesting and stimulating and that they had particularly valued the opportunity to learn how to plan for their dissertation before the final year, e.g.: ‘I believe this module gave us the chance to think and prepare notes and express our thoughts for next year's final project. It was also helpful to do the action plan, the oral presentation and to obtain the tutors’ feedback’ (Semi-Structured interviews November 2008).

However, it also emerged that students had found the module challenging: words such as ‘daunting’ and ‘scaring’ were used. This was confirmed by the previously mentioned low pass rate for a second year module. Although one of the possible explanations for this outcome was that the cohort was not a strong one, I decided to ask students directly what they had found so troublesome in the semi-structured interviews that took place in November 2008. Four female students (out of a cohort of 42) volunteered to take part in the interviews, of these 2 had obtained marks in the mid-50s range, one in the top-60s and one in the top-70s. Despite their marks, they all confirmed that they had found the
module troublesome. The analysis of the interview transcripts was consistent with the other data collected: there appeared to be two main areas of difficulty:

- The ‘epistemic game’, the linguistic tools (Perkins, 2006) required to engage with the ‘discourse’ of research in English Studies.
- The ontological shift of identity required to ‘being/becoming’ a researcher.

With reference to the first point, having taught an introduction to research methods to the same students in the first year, I had made the incorrect assumption to think that they had become acquainted with the concepts and ‘epistemic arsenal’ relating to critical and analytical thinking previously covered. This was not the case for many students who did not seem for example to be able to distinguish between the daily use of certain terms and their use in an academic context, e.g. ‘criticise’ and ‘argue’ (see quotation in the introduction). They associated their semantic field with the negative connotations that the two terms have in a daily, conversational use, rather than within academic conventions. Students found the following ‘epistemes’ particularly challenging:

- ‘Qualitative’ and ‘Quantitative’ (including their spelling and pronunciation).
- Discourse/Discourse analysis.
- Literary criticism (inability to choose a ‘literary filter’ and understand its underlying principles in relation to a text).
- Primary sources/Secondary sources.
- Literature/Literature review.
- Literature/literacy/literary.

As for the ‘ontological shift’, the students interviewed ascribed their difficulties to the following factors:

- Lack of confidence in carrying out independent research.
- Fear of criticism because it is a personal project (‘it’s personal, it’s very close to you’) and difficulties in handling criticism (possibly also to do with the ‘literal’ understanding of the term, as illustrated above).
- A feeling of loneliness, inability to compare their own work with that of their peers (‘carrying out your own research project is not like having to write the same essay that we all have to do’).
• Fear of the ‘unknown’: a perception that a research plan and a dissertation are beyond their reach because they have never done ‘research’.

The analysis of the feedback, the presentations and of the research plans resulted in the identification of the following ‘ontological barriers’, students had difficulties with ‘visualising’ themselves as researchers and ‘thinking’ as researchers (confidence issue), with ‘becoming critical’ and with ‘becoming independent’.

Many students also struggled with engaging with ‘real’ reading around their chosen subject and they failed to engage with the level of academic digital literacy needed to search databases and critically select journal articles suitable for their chosen area of interest. The dedicated support of the English subject librarian and the design of tailor-made online information retrieval exercises only partially helped with this issue. It could be argued that due to the level of independence required for this module in the choice of subject matter to cover, the students were required to invest more in the ‘thinking processes’ linked to autonomous learning. In Learning to Think: Disciplinary Perspectives, Janet Donald reports the outcome of her discussions with higher education professionals about the ‘thinking processes’ needed by students at tertiary level. The analysis of her data made her conclude that the following are common to all disciplines (2002:284):

   - **SELECTION**: Choose relevant information; order information in importance; identify critical elements, identify critical relations.
   - **REPRESENTATION**: Recognize organizing principles; organize elements and relations; illustrate elements and relations; modify elements and relations; change perspective.
   - **SYNTHESIS**: Combine parts to form a whole; elaborate; generate missing links; develop a course of action; confirm results.

The difference in English as a discipline is that all the above processes revolve around ‘text’ in a kind of tautological way. The inference and interrelationships stem from text and relate to text selection, analysis and deconstruction. This applies both in linguistics and in literature. The systematic analysis of text should occasion a change in perspective and this can have a destabilizing effect on students, who struggle to cope with the ‘uncertainty of text’. Donald makes the bold claim that students reading
English struggle with the above processes of selection, representation and synthesis because ‘the terminology developed thus far in the discipline (of English) to explain thinking processes is insufficient to guide student learning’ (2002: 263). She argues that there is a discrepancy between the way students are taught and what they are expected to do in their essays (i.e. argumentation) and proposes that ‘students need to be helped to find patterns and to search for evidence in order to draw conclusions and formulate their own questions’ (Donald, 2002: 270). It would therefore appear from the troublesome approach students had to engaging with their own independent research in 2007-2008 that a new subject-specific threshold concept was emerging: the uncertainty of text, while students were also challenged by the related generic troublesome concepts listed in Donald as ‘thinking processes’: selection, representation and synthesis. As they had to also select their texts of choice to analyse, the trouble was caused by the ‘double hurdle’ they were facing. The challenge for staff was to put in place curricular interventions that would make the transition to ‘becoming researchers’ less troublesome in view of the above findings and to help students with coping with the both the subject specific and the generic threshold concepts identified.
PHASE 2: ACADEMIC YEARS 2008-2009 and 2009-2010

ADDRESSING TROUBLESOME KNOWLEDGE

The lessons learnt in 2007-2008 informed the changes implemented in the module in 2008-2009 and 2009-2010. Many lectures were re-written: less stress was put on addressing the question ‘what is research?’, and more on encouraging students to ask themselves ‘how can I think like a researcher?/how can I become a researcher?’ Tailor-made group exercises were designed for this purpose for the seminar sessions and students were invited to carry out ‘deconstruction’ of existing pieces of research in English Studies.

A stronger focus was put on explaining the difficult epistemes relating to carrying out research in English Studies and glossaries of the terms that had proven to be challenging in 2007-2008 were provided to students.

Clearer ground rules were set referring to what research means at undergraduate level, so that students did not feel under pressure to produce an original piece of research; however, it was also highlighted to them that original research might be a possible outcome of their project proposal.

As recommended by Donald (2002: 288-292), the promotion of a research environment was carried out in a more systematic and overt way with students by actively ‘creating an intellectual context’ (Donald, 2002: 289) in which students are informed of the goals of the university, their course, their module and in which examples of good practice are provided. Using the e-portfolio PebblePad made it easier to ‘display’ examples of good practice in the shared gateway.

As it is widely accepted that assessment is a ‘driver’ for students (e.g. Race 1999; ASKe 2010), a more systematic approach was taken to the posting of the research draft action plans into the e-portfolio. Students were asked to post an optional formative action plan per week, but also required to attach one action plan to the individual presentation webfolio, and this plan was summatively assessed. The introduction of the summative assessment of the action plan resulted in students posting more formative drafts to the shared gateway. This made it easier to monitor their understanding of the research planning process and in many cases enabled me to identify problematic issues before the final
summative tasks were submitted. Positive feedback was received by students on this point: ‘I like constantly getting feedback on action plans so I know how well I am doing’ (anonymous feedback from the 2008-2009 cohort).

Although there already had been some stress on engaging in reflections on the learning process and on the links between project planning and career planning (transferability of competencies and skills), clearer instructions were provided to students on how to carry out such reflections and their individual and collective engagement in the reflections on how to carry out research were monitored more closely. As previously argued:

in order to help students to cross threshold concepts it is necessary to devise student-centred activities that allow them to engage both in individual and collective reflection on the troublesome knowledge encountered. The overcoming of ‘stumbling blocks’ will be greatly helped by the opening up of a dialogue between students and tutors and amongst students themselves and by activities that foster this dialogue, as well as by encouraging students to engage in ‘metareflection’ on the difficulties encountered’ (Orsini-Jones 2008:220)

The above statement is corroborated by the fact that students commented positively on the peer assessment of the individual presentation: they obviously valued sharing knowledge even if they were apprehensive about it: ‘I found the peer-review process daunting by hugely helpful’ (feedback 2009-2010).

Many students also asserted that the module built their confidence in terms of becoming researchers. One particularly pleasing feedback statement received by a student in 2008-2009 was the following: ‘I like this module because it promotes critical thinking’.

On the whole, it appeared that the actions implemented following the identification of the troublesome knowledge impacted positively on the students’ ability to think ‘like a researcher’. The June pass rate for 2008-2009 was 90%, and 87%, for 2009-2010, both significant improvements over the 77% in 2007-2008, particularly in view of the increase in the number for each cohort (42 in 2007-2008, 67 in
2008-2009 and 94 in 2009-2010). The same epistemological and ontological issues identified in academic year 2007-2008 still surfaced, but students appeared to be more confident in tackling them.

The pleasing pass rates did not however mean that students were fully at ease with the research process. Although some excellent plans were submitted, which also evolved into outstanding dissertations in the final year, many students still appeared to struggle with the articulation of their ‘research vision’, the discussion of the relevant literature and with the choice of ‘text’ to analyse. It is interesting to notice that there is a certain correspondence between these results and those reported in a study on postgraduate students’ engagement with their PhD, where Kiley and Wisker discuss conceptual thresholds:

Student meta-cognition, conceptual level thinking and developing facility and ability to articulate their research learning were seen as crucial in the development of postgraduates’ doctoral learning journeys through to the crossing of conceptual thresholds and achievement of their doctorate. We argue that conceptual thresholds are the stages or critical points in students’ research journey where they move into work at a conceptual, critical and creative level. Such moments include, for example, the identification of a research question from a topic, and engagement in dialogue with the literature, placing their own work and findings in their own voice in this dialogue. (2010:401)

Despite the higher confidence levels, the average marks for each task became lower in 2009-2010 (52% and 50%) than in 2008-2009 (55% and 57%) and 2007-2008 (50% and 57%). Although the lower averages in 2009-2010 could be attributed to the fact that the cohort was weaker on the whole, it was particularly worrying that the mark for the second task was lower than that for the first one, a result that was not in keeping with the previous two years and showed a lack of ‘personal growth’ in terms of becoming a researcher. This finding requires further investigation in a separate study.

As for successful students, who managed to ‘visualise themselves as researchers’ by the end of the module, the data analysed would appear to indicate that the ‘cracking’ of the epistemic code (e.g. understanding the difference between qualitative and quantitative research; understanding the ‘rules of
the argumentation game’ when writing their literature review) helps with ‘becoming researchers’ and with being less challenged by the ‘uncertainty of text’. The sharing of this epistemic knowledge, reinforced by its reiteration and questioning during the ‘discoursive period’ of the assessed individual presentations, also appears to help in this respect.

CONCLUSION AND RECOMMENDATIONS

The mixed results of this study illustrate that troublesome research knowledge requires further investigation.

It would appear from the data collected that with successful students the ontological ‘shift’ (‘thinking like a researcher’; ‘becoming a researcher’) happened in correspondence with the acquisition of the epistemological armoury necessary to analyse their chosen topic. The confidence that ensued also enabled these students to overcome the block of choosing suitable ‘text’ to analyse and to cope with the difficulties inherent to analysing/deconstructing text at a deep level. On the other hand, it emerged that many undergraduate students can be quite ‘literal’ and need to be taught the ‘epistemological armoury’ (Perkins, 2006) necessary to engage in research. This ‘epistemic gap’ causes a high level of anxiety and some students feel intimidated by the concept of research in itself because they think that they are not ‘up to it’ (Semi-Structured interviews 2007-2008).

The engagement with the individual presentation process seemed to occasion a transformation in some students, and trigger a cognitive reaction that lead to the crossing of the generic threshold concept of ‘becoming a researcher’ who could master the three ‘thinking processes’ mentioned by Donald of ‘selection’, ‘representation’ and ‘synthesis’ (2002). As illustrated in other existing related literature (Pang and Meyer, 2010) there is variation in the way individual students approach the limen of the threshold concepts identified and many students oscillate around these thresholds, sometimes feeling that they have grasped them and at other time feeling that they have regressed (this often manifested itself with the trouble with choosing a research topic and then changing it once chosen to then go back to reconsider it again). The writing of action plans in PebblePad appeared to help with catering for the students’ different modes of variation and enabled the tutor to take action about their individual difficulties in a timely way.
Needless to say that in most cases success in research planning was linked to the interest for the subject chosen for the dissertation – motivation or lack of it has already been identified previously as a major factor in troublesome knowledge (Orsini-Jones and Sinclair, 2008). Even ‘good’ students struggled until the chosen topic ‘clicked’ into place. There were many instances of students considered to have an overall weak profile who produced outstanding project plans, thanks to a passion for the subject chosen. There were even cases of ‘catharsis’ triggered by the engagement with this module: students who were failing the degree, but were ‘brought back from the brink’ by the passion for the topic chosen, e.g.: ‘the dissertation proposal and planning module has got me interested in the intricacies of language study once again, having felt quite demoralised for some time’ (reflective statement, 2009-2010).

The data collected confirms once again that the Vigotsky tenet of the need for socio-collaboration to promote the learning process applies (Vigotsky 1986, cited in Beetham, 2007:36): sharing knowledge with tutors and peers both online and face-to-face proved to be successful, even if the tasks were individual ones and individually assessed.

Although many students struggle with reflecting upon and articulating how they learn, it is important to engage them with meta-cognition, as there is evidence that it helps with coping with troublesome knowledge and with crossing threshold concepts (Orsini-Jones 2010; Meyer, Ward and Latreille, 2008:1 in Land and Meyer, 2010:77). However this presents tutors with a further issue: students need to be taught how the ‘discourse’ of meta-cognition for personal development planning and cognitive growth differs from that of writing up research findings in their dissertation.

A research scaffolding strategy needs to be put in place to support students in their ontological journey of ‘becoming researchers’. Research action plans with a tailor-made tool like the e-portfolio PebblePad can help with this as well as face-to-face socio-collaborative research planning activities followed up by online discussions.
Engaging some of the less independent students in research planning and inquiry-led learning can prove to be very challenging. They will not avail themselves to the help offered to them and will fail to produce a research plan. Further support needs to be put in place for them, together with clear ground rules referring to what research means at undergraduate level, so that students do not feel that they must produce an original piece of research.

A final positive outcome of this ongoing study was to trigger a discussion about research at undergraduate level amongst the team of staff involved in module *Dissertation Methods and Approaches*. All colleagues in English had to become involved in it as they would have to supervise the students’ dissertations in the following year. The action research cycles have therefore also incorporated feedback from staff.

As for the subject specific concept identified, it would appear that it is not just grammar analysis that is problematic (as previously highlighted in related studies, e.g. Orsini-Jones, 2008). In English Studies all texts require a level of analysis and deconstruction that can prove to be challenging for an undergraduate student. More work is needed in supporting undergraduate students reading English with coping with the ‘uncertainty of text’.
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Meyer, Land and Lattreille


