

THE SUPERFOODS OF ONLINE LEARNING: THRESHOLD CONCEPTS AND THRESHOLD SKILLS

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Abstract

*This article explains an action research project conducted at The Open University in the UK to assess whether synthesising teaching of threshold concepts with threshold skills could create 'superfoods' of online learning. The aim was to identify study interventions which had a high impact creating maximum benefit for students. The goal was to raise retention and pass rates for and to foster mastery in second year law students. The research was run initially within a tutor group context and ultimately rolled out on two second year LLB modules. The skills training was first trialled in face-to-face tutorials and was then combined with the development of substantive materials for online classrooms.*¹

The initial focus was on a constructivist approach to design of materials across the spectrum of study skills. As the project developed it looked in particular at what are termed in this article 'threshold skills', that is skills which students found counter-intuitive and troublesome but which they needed to develop in order to be able to perform well and progress on the LLB. In the final iteration these were synthesized with threshold concepts to facilitate mastery. The sessions aimed to raise standards across the spectrum of student ability.

Introduction

There is now a wealth of study skills literature available to law students, for example, Buzan (2007, 2010), Finch and Fafinski (2012), Cotterell (2013), Haigh (2015), Maughan and Webb (2010), Mc Vea and Cumper (2010). Students, employers and consequently tertiary education institutions are interested in the acquisition of skills that transfer into an employment context. The Quality Assurance Agency subject benchmark statement for law (2015) places the acquisition of skills alongside that of substantive subject matter knowledge². Module materials and assessment have skills written into the learning outcomes.

In the light of the importance now placed on the acquisition of academic and transferable skills as an integral element of the undergraduate study of law, this article explains an action research project (the scholarship project) to develop skills training for second year law

¹ My thanks go, in particular, to the module teams with whom I worked and continue to work and the leadership and scholarship teams at the Open University together with the academics at the University of Law and the external examiners on both modules.

² See also: Legal and Education Training Review (LETR) <http://letr.org.uk> (accessed 28 May 2015).
LETR report <http://letr.org.uk/the-report/index.html> (accessed 28 May 2015)

students to enhance deep learning, retention and pass rates. In the final iteration the scholarship project sought to identify interventions that had maximum benefit for time-poor students – the ‘superfoods’ of online learning.

The skills materials (the essential study skills material) initially covered all the core skills required of second year law students on a qualifying law degree. As the project developed it became evident that some skills were more troublesome for students than others. Accordingly in order to conceptualise the approach taken to skills development certain skills incorporated in the study interventions were considered as “threshold skills”, akin to threshold concepts (Meyer and Land, 2003, 2005, Cousins 2006, Land et al, 2016). Meyer and Land define threshold concepts as those concepts within a subject area that are problematic for students, but once understood transform their understanding. The scholarship project developed this concept for skills, identifying skills that students found troublesome but which they need to acquire in order to progress with their studies. These were skills which transformed them into degree level academic learners. Once acquired these skills transformed the way they approached their legal studies and stayed with them facilitating deeper learning. The project identified a number of threshold skills including legal reasoning (Akerlind et al, 2010); the ability to tolerate ambiguity; understanding an essay/problem question; critical analysis; exams and revision and; timetabling. The project examined whether synthesizing threshold skills with threshold concepts using constructivist learning enhanced students ability to master a subject.

The advantages of skills training

Research undertaken by Christensen (2009) in the United States of America (USA) had demonstrated that integrating skills and legal knowledge maximized law students’ learning. Christensen’s research (2009: 797) demonstrated that students who were willing to develop their skills tended to be ‘mastery-orientated learners’ and were concerned to chart their own progress rather than compete with others and measure their success against others. Those who were mastery-orientated learners tended to remain on the degree and were more successful than those who failed to engage with skills development. The skills grade which students received for skills specific training was the strongest indicator of law student success.

The distinction between the current study and that undertaken by Christensen in the USA was fourfold. First the nature of the students: each cohort in the OU law school study included a substantial number of mature, part-time and open students (no prior qualification required for first year students). Second: the scale of delivery. The Open University law school had 8000 students registered in 2015-2016. During the research project on the modules subject to the action research project there could be between 400 – 1000 students registered on each module. Third the method of delivery: the OU delivered its LLB through distance learning. Fourth: the scholarship project focused on the delivery of online skills

training using online classrooms. The delivery of training sought to optimise flexibility for the students by using prerecorded sessions (asynchronous tuition), combined with some real time (synchronous) sessions where tutor and student were in an online classroom at the same time.

The synchronous use of technology, including online classrooms was well documented in the literature (for example Kirkwood and Price (2011); Brinthaupt et al (2011)): the use of online classrooms using an asynchronous method of delivery was subject to more limited scholarship research.

Action research had been undertaken by Dickie and Van Galen (2016) in Land et al (2016). They assessed students' difficulties in coping with asynchronous online teaching materials. The project explored how to address these issues through module design, in particular how to signpost online content to students.

The scholarship project in its final iteration consisted of 10 prerecorded (asynchronous) study skills sessions, 5 assignment preparation sessions (1 synchronous and 4 asynchronous) and a revision bootcamp (asynchronous). These were interwoven with existing teaching and learning materials. Tutors were able to identify the need for additional skills training to students when marking their assignments. Signposting was therefore undertaken by the tutors. Tutor/student interactivity was also built into the asynchronous materials since the sessions encouraged students to seek further assistance from tutors on study skills if they so desired. The scholarship project went beyond the Dickie and Van Galen study, to consider (1) what was the optimum manner in which to deliver the skills training (2) how to design the content of the sessions by synthesizing skills training with threshold concepts.

The action research project context

The existing module material that students were using took a constructivist approach to teaching and learning and was interspersed with activities. It did not, however, contain in depth teaching on **how** to develop the spectrum of skills required for completion of level two study.

Students submitted 5 assignments during a module presentation and were given detailed feedback on skills development, as well as on their knowledge and understanding. Tutors were required to give guidance on suggested ways to improve, in particular in those areas where students demonstrated gaps in their skills. The main focus for student's analytical skills development was on problem solving and critical analysis in essay writing. Tutors could send students to generic Open University materials, for example on essay writing.

Module results demonstrated that for many students this was not, however, sufficient to enhance their skills to the level required to complete the LLB either at all or in order to perform to their maximum potential. My experience as a tutor between 2006-2015

demonstrated that students required specific tutoring on their skills development in the context of the module they were studying in order to gain the relevant skills. Skills training needed to be synthesized with module specific content in order to facilitate mastery rather than mimicry in the students.

A trial in 2014 with my own tutor group involved taking the six lowest scoring students for the first assignment and providing an hour tuition per student of synthesised training on skills and module content. All but one of the students saw an increase of 10% in their next assignment. More importantly they appeared to have mastered the skills necessary for ongoing success. This was evident when comparing their results with previous patterns of student behaviour. Those who scored lowest for their first assignment tended to drop out before the final assignment was due. For the students given the one hour of extra training every student stayed with the module during the assignment writing stage and passed that stage of the module.

Students consistently fed-back that they found it helpful to see how the skills were put into practice in relation to the module materials in order to grasp how they were supposed to be developing and applying their academic skills.

In the light of this feedback and in order to add value to existing resources and impact upon students' study experience within the limited amount of time available to part-time distance learning students, the essential study skills material needed to have a high impact. Quantative and qualitative data together with student feedback indicated that tailoring the skills material to threshold concepts and aligning them (Biggs, 1996) with module learning outcomes and assessment created an efficient means of facilitating student mastery. The coherence of the materials was designed to assist the students in making connections necessary for the threshold concept/skills journey.

The methodology

In order to develop and test the effectiveness of skills training it was decided to adopt the action research model developed by Whitehead (1988) and expounded by McNiff (2013, 2014). Both qualitative and quantitative data collected by the Open University Institute of Educational Technology was used to inform the reflection and re-implementation elements of the cyclical action research process. Feedback was taken from tutors and students in the live sessions. In the final iteration of the scholarship project (2015-2016) a survey of both tutors and students was designed to gain feedback on the specific skills interventions implemented in that presentation.

The research was empirical in so far as it implemented a method of skills training for groups of students and measured success using quantitative and qualitative data. The cyclical method of reflection, adaptation and reimplementation led to the layering of interpretive

research over the empirical approach.

The need to understand the development of materials and method in the context of scholarship theory then led to a critical-theoretic approach which was adopted, in particular, during the periods of reflection prior to redesign and reimplementation. It was this element of the research process that led to the development of the concept of threshold skills and the synthesising of threshold concepts and skills. Unlike the strictly critical-theoretic approach the action research method additionally required action to be taken upon the basis of conclusions reached during the period of reflection.

The theory: from threshold concepts to threshold skills

Interaction with students and reflection on assignment and exam performance revealed that students were finding certain skills troublesome – despite detailed feedback on assignments some were not able to grasp legal reasoning, for others critically analysing a statement was a difficult process.

In order to conceptualise a way to approach the development of the skills training the theory of threshold concepts was used. This theory was developed by Meyer and Land within a UK national research project into ‘Enhancing Teaching-Learning Environments in Undergraduate courses’ – <http://www.tlrp.org> (Meyer and Land (2003), (2005), Meyer et al (2016)). Meyer and Land’s work built upon the research of Perkins (1999) looking at ‘troublesome knowledge’. That is knowledge that is ‘alien, or counter-intuitive or even intellectually absurd at face value’ (Meyer and Land (2003:2)). Threshold concept theory has been developed, for the most part, on subject specific material – academics have identified topics within their discipline that fit the threshold concept criteria in order to inform module design: for example Meyer et al (2016).

According to Meyer and Land threshold concepts are:

1. Ideas that are passageways or portals to enlarged understanding of ways of thinking and practicing within a discipline (although attempts have been made to identify threshold concepts that cross disciplines).
2. Transformative: once grasped by a student the potential effect is to facilitate a significant shift in the perception of a subject.
3. Probably irreversible: the change of perspective is unlikely to be forgotten.
4. Integrative: it exposes the previously hidden interrelatedness of something.
5. Potentially troublesome.

A threshold concept is distinct from a core concept. Core concepts are ‘building blocks of the curriculum (Webb, 2008 and Wimshurst, 2011).

The focus in scholarship literature on threshold concepts as subject specific topics, principles or ideas within a discipline had to some extent taken one of the three roads initially set out by Perkins in his research into troublesome knowledge. He identified 'double-trouble', that is the difficulty some students have not only with a substantive concept itself but with 'playing the game' that enabled students to either acquire the knowledge or apply/manipulate that knowledge. This Perkins described as playing the game knowingly (Meyer et al (2006: xvi)). This involves metacognitive knowledge, metacognitive skills and metacognitive experience. It was this trinity of metacognition that the threshold skills materials developed under the scholarship research and sought to harness through design and implementation of the materials.

Research had been undertaken with a focus on skills, rather than the acquisition of knowledge, by Akerlind et al (2010) in Australia. Akerlind's project looked first at whether uncertainty (that there are different ways of considering an issue and different potential answers) was a threshold concept in first year legal education. They ultimately moved on from the ability to manage uncertainty and instead settled on legal reasoning as the threshold concept essential for first year law students. This was because it was transformative – it enabled students to start thinking like lawyers and test issues to the boundaries. It was integrative in that it linked academic study to practice as a lawyer and linked up with the importance of evidence and argument. It was troublesome since it involved students in taking responsibility for their position and forced them to back up their arguments with evidence – for many this was a new experience and changed preconceptions about what the law was. The technique once learnt would remain with students throughout their studies. The research team agreed that mastery would not be achieved in the first year but that teaching the skill up to level two in the first year would undergird further development and study in law generally through the remainder of the students' degree studies. Students would then engage in further mastery as they worked through their degree.

The scholarship project built on the research outlined above by developing a broader spectrum of threshold skills than the Akerlind study. It facilitated the trinity of metacognition identified by Perkins by identifying troublesome skills and synthesising these with threshold concepts. Materials were authored using a constructivist approach to learning which interwove the development of knowledge and understanding of the subject matter with the development of threshold skills.

Synthesising threshold concepts and threshold skills

The threshold skills identified in the action research project included legal reasoning, the ability to tolerate ambiguity, understanding an essay/problem question, exams and revision and timetabling.

Threshold concepts identified in the field of public law included the doctrine of parliamentary

sovereignty, the rule of rule, the concept of a constitution and the separation of powers doctrine.

An example of a question used to create the synthesis between threshold skills and threshold concepts was:

“Compare and contrast the manner in which the doctrine of the separation of powers is applied to written and unwritten constitutions”

Students explained that they found it difficult to understand how to break down the question and work out the additional knowledge they were required to demonstrate beyond the self-evident knowledge identified by the wording of the question. They also found it a challenge to work out how to handle the concepts in order to produce the analysis required and how to balance the information to put into the assignments. Time and again assignments would be submitted providing basic knowledge of a topic or part of a topic but failing to address the question. Students did not understand what it was they were supposed to do with the knowledge and how much information to include on a particular topic.

The skills materials were designed to take students step by step through the process of deconstructing a question, identifying relevant knowledge and building analysis round it. Students were encouraged to do this using the ‘analytical’ words indicated in the question. They were given tools for identifying and researching the subject matter. They were then taught how to identify what to do with the knowledge and to do some ‘thinking’ around the knowledge they were required to explain.

In the context of the above question the process was stepped up to give the students confidence by enabling them to identify knowledge on the nature of the constitution and the doctrine of separation of powers. They were also required to think about the interlinking nature of the topics including the additional concepts of parliamentary sovereignty and the rule of law. Some students tried to do all the thinking in one go – rather than breaking down the process - or they failed to provide any analysis at all. Once they understood that the process was a gradual one involving the demonstration of knowledge first they found it easier to start their assignments. They also then took the time to go on to think about the implications of what they learnt.

The process of comparing and contrasting enabled students to start broadening their understanding of these concepts. They were required to identify differences. This enabled them to create the links necessary to start to deepen their understanding. At the same time they were learning to address the question asked.

In the process of providing tools for students to develop the threshold skills of identifying what a question was asking and to identifying the analysis required in it, students were also

getting to grips with threshold concepts,. In the above example the threshold concepts incorporated within the question were the doctrine of separation of powers, the concept of a constitution, the rule of law and the doctrine of parliamentary sovereignty. These concepts linked into other threshold concepts and core concepts.

The constructivist and contextual approach to the acquisition of skills enabled students to build up methods of approaching their assignments which they could use as they moved on to other topics. Students' assignments demonstrated that once they had learnt what was meant by 'analysis' by having worked through an example in a context they were currently studying, they then took that skill on with them and applied it to future assignments. They then succeeded in including analysis in future assignments.

Similar stepped, synthesised activities were provided to students in respect of other threshold skills.

The revision bootcamps

In addition to the skills training offered during the module presentation it was decided to provide revision sessions for the students – a 'revision bootcamp'. These were run in the final month before the exam. Students were provided with two prerecorded online sessions suggesting various approaches on how to approach exam questions. They were then given exam questions at the beginning of the week and told to focus on one of the four manuals which formed the basis of the module materials. The following Friday the students could attend a live online classroom session (first iteration of the research project) or prerecorded sessions (second iteration) during which the academic team ran skills sessions to explain approaches to revision and the exam, using the exam questions provided to students. In response to student feedback from the early sessions the students were given information demonstrating what high quality and poor quality answers might look like.

Many students expressed surprise at the depth of knowledge and understanding they were required to obtain in order to be able to address exam questions posed. They also appreciated having a better idea of what was expected of them – having felt somewhat 'in the dark' about what they were required to produce by way of an exam answer.

It was necessary to ensure that the skills training did not encourage mimicry but fostered mastery of both the skills and the threshold and core concepts. They sessions therefore emphasized to students that various approaches could be taken to skills development and to addressing assignments and exam questions. This enabled students to develop skills which best fitted their learning style. The quantitative data indicated that students were starting to master the skills and apply them to new subject areas within their current course of study.

Design of the essential study skills sessions, revision sessions

The essential study skills material took a constructivist approach to student learning by creating a space for transformation to take place. Explanations of concepts were accompanied by activities to engage the students. The learning for the students was experiential since the skills training was interwoven with tutor feedback. Students could practice skills they had learned in their next assignment.

Some students studying the degree were using their legal or academic skills at work and so were gaining transferable workplace skills and undertaking a form of situated learning (Fry et al (2009: 21)). They were given space to reflect on their learning by using a study skills checklist requiring them to review tutor feedback and their own progress.

The checklist was divided into headings as follows:

Core skills (learning how to learn)
Assignment writing (cognitive, key and practical skills)
Digital literacy
Numeracy
Transferable skills and practically using the law
Reviewing and memorizing

Table 1: checklist headings for skills development.

Each study skill was identified under a heading and then classed as either a cognitive skill, practical and professional or key skill. This classification was put in to tie in with tutor feedback under these headings on assignments. This meant that students could easily mark up the self-assessment checklist when they received feedback on assignments. They could identify the skills as already obtained, needing additional independent study or requiring assistance from their tutor. The checklist bore in mind the need for reflective personal development planning (PDP) (Finch and Fafinski (2012: 232-235) and involved students reflecting on skills likely to enable them to meet Susskinds' (2013) prophetic writings for lawyers of the future.

Where study skills gaps were identified in the assignment it was possible to direct the student to the relevant study skills session. The student could use the session to develop the skill through activities in that session and then mark up the study skills checklist.

This method facilitated a cost effective approach to increasing guidance for students and addressed concerns in the higher education sector that opportunities for student/tutor contact was diminishing. These concerns were set out by Hounsell (2008: 2) who described this as 'shrinking opportunities for guidance and interaction'. This was also reflected in the National Student Survey. Students registered only 72% overall satisfaction with assessment and feedback in the National Student Survey in 2013 and 2014.

<https://www.timeshighereducation.co.uk/news/national-student-survey-2014-results-show-record-levels-of-satisfaction/2015108.article> (accessed 26 January 2015)).

The essential study skills materials addressed these concerns because prerecorded sessions provided targeted guidance on specific areas of concern for the student. It encouraged interaction for distance learning students since the sessions facilitated interaction between the tutors and students. The sessions and checklist encouraged students to contact their tutor if they required further assistance in developing any particular skill. The sessions also facilitated feed forward since students could be sent to resources to develop skills that they could work on between assignments and then practice in the following assignment.

Catering for various learning styles

The materials were designed to cater for various learning styles identified by Wolf and Kolb (Woolf et al (1984)). They were non-prescriptive, setting out a variety of methods for students to work with to enhance mastery rather than foster mimicry. By providing options they encouraged students into the liminal state necessary for transformation in understanding to take place (Meyer, Land, Baillie et al, 2010).

The skills training materials presented students with various methods and ideas leaving them to explore and generate their own style and method if they chose to go beyond established methods. This meant those who enjoyed a divergent learning style could *adapt* the methods by using their imaginative ability and generating their own methods of working.

The sessions proposed frameworks for those who needed them and a jumping off point for those who wanted to adapt them. This also enabled those whose strength was assimilation to pull together a coherent strategy of their own for learning.

In addition the materials played to the strengths of the accommodative learning style by enabling students to plan and engage in voluntary additional activities in ways that were new to them. They were presented with alternative methods, then presented with a problem scenario or essay question. They were then encouraged to try different methods in order to find a method that worked best for them.

The materials provided, for example, various approaches to legal problem solving including mind-maps, the use of lists and flow diagrams. These were to assist students in putting together the steps necessary for problem solving in logical order.

The Kolb-Biglan Classification of Academic Knowledge set out by Becher ((1989), cited in Fry et al (2009: 28)) identifies law as using a particular combined learning style, namely the combination of (1) concrete experience, learners are involved in new experiences and (2) active experimentation – using theories to make decisions and problem solve, test

implications and generate material to re-implement the process. The essential study skills encouraged, in addition, a reflective approach facilitating a rounded learning style by the students and took them outside what might otherwise be the comfort zone for law students.

Students were provided with some abstract conceptualization to assist their understanding. This consisted, for example, of theories of how the memory system and brain works. The materials, in so far as the students chose to engage with any relevant part, therefore had the potential to accommodate the activists, the reflectors, the theorists and the pragmatists – however their effectiveness required a willingness on the part of a student to move outside their core learning style and adopt one of the other learning styles from time to time. The reflectors, for example, could rely on the study skills check list and tutor feedback to reflect on their learning and improvement but needed to respond actively to the learning environment and implement change if the sessions were to be effective for them. There was no assessment of their reflective activity per se – this had to be demonstrated in an improvement of the skill they had reflected upon in assignment and exam performance.

The materials were designed to change student approaches to learning by providing them with the ability to create the tools within themselves to do so. Their journey into the liminal space was encouraged in order to enable them to transform their understanding. This would then enable them to take a deep approach to learning so that their use of academic skills and understanding of the substantive material was transformational. Biggs and Moore see student approaches to learning as modifiable, although Fry et al regard them as difficult to change (Fry et al, 2009: 31). In practice student responses in online sessions and performance in assignments demonstrated that some students adopted new methods and made them their own more easily than others. Once students had experienced transformation in one area, for example, learning how to adopt a method of problem solving, they then became more ready to experience it in another.

The online materials were used strategically at key points in the module presentation: Kirkwood and Price (2011) and Brinthaupt et al (2011) emphasise the need to use technology not only to support and enhance student learning but to transform it in order to enable students to undertake learning activities in ways that had previously been difficult to achieve. They emphasise that the desired educational end, and not technology itself, needs to drive learning design. Dickie and Van Galen (2016) observe that identifying how students are using the technology and whether there are barriers to learning in the use of technology itself is important. They argue that intelligent design can increase students' teaching and learning opportunities through use of technology.

Students feedback that the online sessions were easy to use and that the flexibility of the sessions was particularly important to them.

Design for deep learning and ongoing mastery of skills

By their very nature the study skills sessions encouraged students into the liminal state described by Meyer, Land and Baillie in Land et al (2010) (for a brief summary of liminality see: <http://www.ee.ucl.ac.uk/~mflanaga/popupLiminality.html> (accessed 16 January 2016)). Liminality is a state where students are prepared and able to accept the unfamiliar, experience uncertainty and transform their understanding so that ultimately they substitute mimicry for ongoing mastery. The mastery was ongoing because students would first grasp a skill at a basic level and as they worked through assignments, received feedback and responded by further developing skills, they re-mastered the skills on an ongoing basis. Students were able to develop integrated understanding, synthesising their skills and substantive knowledge.

Both the prerecorded and live essential study skills sessions provided a safe space for students to develop their skills, a space in which confusion was acceptable and development over time the norm. By rolling the sessions out across a tutor group (and eventually across a module) it became acceptable for students to reveal confusion and they were not made to feel that they were the only one to find skills development a challenge. The study skills checklist enabled students to go back over specific skills training as they worked through their assignments and received feedback. This was because the emphasis was on ongoing skills development rather than single one-off mastery.

Students engaging in the sessions had acknowledged a need to develop their skills, either because they had been made aware of this on assignment feedback or because they themselves had identified this need. There was therefore an awareness on the part of the students that their existing skills development was insufficient for the task they were facing and so they approached the task with a willingness and awareness of the need to transform their understanding. The conditions for them entering the liminal space were therefore set – the challenge was to convince more students of the importance of, need for and benefits of skills training in the first place.

Flexibility

Student feedback during the scholarship project indicated that flexibility was a high priority since the majority were part-time and had work and family commitments. This meant the prerecording of sessions worked well for them. Having sessions that they could listen to at a time convenient to them and which could be taken with them to work, listened to during a commute to and from work or during a lunch break meant they could fit their learning into the gaps they had available. It enabled them to fit the stage of understanding and gaining knowledge into bite sized chunks.

Flexible delivery across a tertiary institution has been evaluated by Nichols and Gardner (2002) at the Universal College of Learning, New Zealand. The project focused on student

needs and the use of educational technology. It evaluated the experiences and perceptions of lecturing staff and heads of faculty and assessed student perceptions and acceptance of flexible delivery.

According to Nichols and Gardner (2002: 11) lecturers fed-back that:

“[S]tudents were more able to access learning, enjoyed learning more and were developing a wider range of study skills; however, pass rates and retention rates did not seem to have been significantly affected. Students who were at risk of failing the course and needed to attend face-to-face support sessions were not doing so.”

There was concern amongst those surveyed by Nichols and Gardner that “the less motivated students were struggling” (2002: 11). Lecturers felt their role had become that of a coach or facilitator.

Mindful of the need to engage the students and develop the student tutor relationships the scholarship project combined asynchronous and synchronous learning. The aim of the prerecorded sessions was to give students the opportunity of starting the learning process to encourage them into the liminal space. Or at least set up the conditions for them doing so prior to their face-to-face or live online tutoring. Weaker students were actively encouraged by tutors to engage with the skills training. The stepped approach to developing threshold skills and understanding threshold concepts was important, in particular for those students who were struggling, since they were thereby encourage to stay with the sessions. Students fed-back that the interaction within the sessions was easier than they had anticipated because of the way in which the activities were designed, gradually working through the skills development.

Reflections on the scholarship project.

At tutor group level the action research had a positive effect on performance and retention rates. In 2014B³ all but two of the students who sat the exam at the end of the year passed it. The two students who did not were permitted a resit. In 2014B and 2014J student satisfaction rates went up to 100%. In addition for 2012B and 2013B 100% of students either agreed or mostly agreed that they were satisfied overall with the tutoring.

	2011 B	2012 B	2013 B	2014 B	2014 J
My own tutor group result	56% strongly agreed 33% mostly agreed	85% strongly agreed 15% mostly agreed	80% strongly agreed 20% mostly agreed	100% strongly agreed	100% strongly agreed

³ The letter indicates the start month of the module: B = February.

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Table 2: Student overall satisfaction rates for my tutor group: Response to end of presentation survey to the statement:

“I was satisfied with the support provided by my tutor on this module”.

What is noticeable is the jump in student satisfaction for my own tutor group between 2011B and 2012B. In 2012B the online classroom was used for the full presentation for the first time. By the time the 2014B presentation commenced I had developed a full set of study skills sessions and sessions on the substantive material. It was at this time that overall satisfaction jumped to 100%.

This compares with 86% rating for overall student satisfaction in the National Student Survey 2014: <https://www.timeshighereducation.co.uk/news/national-student-survey-2014-results-show-record-levels-of-satisfaction/2015108.article> (accessed 16 January, 2015). Improvements were evident in assignment standards, with grades at 10% above the average for the whole cohort, and the retention of students during the assignment stage of the presentation was high. The tutor group provision in 2014J had demonstrated that students benefitted from skills training early on, with a 10% or over raise in grades between the first and second assignments after skills training.

When the action project was rolled out at module level the overall pass rate for the module of 60% in 2014B and 57% in 2014J rose to 70% in 2015J. (There were other factors influencing the pass rates during the scholarship project. The impact of the project was assessed as causing a 10% rise in pass rates. Overall student satisfaction rates for the module recorded on the end of module survey remained constant across the two presentations, although student feedback and comments were more positive for the 2015J presentation. The scholarship project saw a rise in scores of +5% at distinction level and +4 at pass level.

Key to the effectiveness of the skills training was that students needed to understand the importance of developing study skills in the first instance. Motivating them to take part was an essential step in the process. Results and feedback demonstrated that the training benefitted students across the skills spectrum, raising standards overall. Encouraging more students to take this up was likely to reap benefits in both the long and short term. It appeared that certain skills acted as threshold skills – once gained they enabled a student to progress through the module and gave them the foundations for moving more confidently on to the next level.

Conclusion: threshold and transferable skills

The scholarship project has demonstrated that synthesizing threshold concepts and

threshold skills in online constructivist learning sessions could cause pass rates and student satisfaction to rise. These sessions were the 'superfoods' which demonstrated a high impact on pass rates. Using a combination of synchronous and asynchronous sessions had the advantage of providing flexibility and encouraging students to start the process of entering the liminal space at their own rate. Raising pass rates appeared to require targeted teaching and learning opportunities covering both threshold skills and threshold concepts for assignment and exam preparation. Data from the tutor group research indicated that raising student satisfaction appeared to be achieved by assisting students in their understanding not just of threshold concepts but of all the core concepts and the spectrum of skills on the module.

References

Akerlind, G., Carr-Gregg, S., R Field, L Houston, Jones, M Lupton, C Treloar (2010) 'A threshold concepts focus to first year law curriculum design: Supporting student learning using variation theory', paper presented at the 13th pacific rim first year in higher education conference, Adelaide, Australia.

Biggs J., (1996) 'Enhancing teaching through constructive alignment'. *Higher Education* 32(3): 347-364

Brinthaupt, T.M., Fisher, L.S., Gardner, J.G., Raffo, D.M., and Woodward, J.B., (2011) 'What the best online teachers should do' *Merlot Journal of Online Learning and Teaching* 7(4): 515

Buzan, T., (2007) *Buzan's Study Skills*, BBC Active, Harlow 2007

Buzan, T., (2010) *The Memory Book*, How to remember anything you want, BBC Active, Harlow

Christensen, L. M., (2009) 'The Power of Skills: an empirical study of lawyers skills grades as the strongest predictor of law school success (or in other words, it's time for legal education to get serious about integrating skills training throughout the law school curriculum if we care about how our students learn)' *St John's Law Review*, 83: 795

Cottrell, S., (2013) *The Study Skills Handbook*, 4th ed Palgrave Study Skills, Palgrave Macmillan, Basingstoke.

Cousin G., "An Introduction to Threshold Concepts" (2006) *Planet* 17: 4-5

Dickie, M. and Van Galen, I., (2016), 'Navigating our threshold concepts to enable students to overcome theirs' in Land, et al (2016) *Threshold Concepts in Practice*, Sense Publishers, Rotterdam, The Netherlands

Finch, E., and Fafinski, S., (2012) *Legal Skills*, Oxford University Press, Oxford

Fry, H., Ketteridge, S., and Marshall, S., (2009) 'Understanding Student Learning', in Fry et al (2009) *A Handbook for Teaching and Learning in Higher Education: Enhancing Academic Practice*, , Routledge, 3rd ed, Abingdon

Fry, H., Ketteridge, S., and Marshall, S., (eds) (2009) *A Handbook for Teaching and Learning in Higher Education: Enhancing Academic Practice*, Routledge, 3rd ed, Abingdon

Gibbs, G., 'Design for Learning, Designing courses, the practice'. Chapter 2, Pack 4, *Design for Learning*, OU module H850 Postgraduate Certificate in Teaching and Learning in Higher Education.

http://www.open.edu/openlearnworks/pluginfile.php/21303/mod_resource/content/1/h850_pk4c1.pdf (accessed 16 January 2016)

Haigh, R., (2015) *Legal English*, 4thed, Routledge, Oxford

Hounsell, D., (2008) 'The Trouble with Feedback, New Challenges, Emerging Strategies', *TLA Interchange*, 2: 2

Kirkwood, A., and Price, L., (2011) 'Enhancing learning and teaching through technology: a guide to evidence-based practice for academics' Higher Education Academy, York, UK

Kolb, D., Rubin, I., and McIntyre, J., (eds) (1984), *Organisations Psychology, Readings on Human Behaviour*, 4th ed, Prentice-Hall, Englewood Cliffs, New Jersey

Land, R., Meyer R., Baillie, C., eds (2010) *Threshold Concepts and Transformational Learning*, Sense Publishers, Rotterdam.

Land, R., Meyer, J., and Flanagan M., (eds) (2016) *Threshold Concepts in Practice*, Sense Publishers, Rotterdam, The Netherlands

Legal and Education Training Review (LETR) <http://letr.org.uk> (accessed 28 May 2015)

McVea, H., & Cumper, P., (2006) *Exam skills for law students*, 2nded Oxford University Press, Oxford

Meyer, R., and Land, J., (eds) *Overcoming barriers to student understanding* Routledge, Abingdon

Meyer, R., Land, J., and Baillie, C., (2010) Editors' Preface: 'Threshold Concepts and Transformational Learning'" in: *Threshold Concepts and Transformational Learning*, Land et al 2010.

Maughan, C., and Webb, J., (2010) *Lawyering Skills and the Legal Process*, Cambridge University Press, Cambridge

McNiff, J., (2013) *Action research principles and practice*, 3rd ed, Routledge, Abingdon

McNiff, J., (2014) *Writing and doing Action Research*, SAGE Publications Ltd, London

Nichols, M., and Gardner, N., (2002) 'Evaluating Flexible Delivery across a Tertiary Institution' *Open Learning* 17(1): 11

Perkins, D., (1999) 'The many faces of constructivism' *Educational Leadership*, 57(3)

QAA, Subject Benchmark Statement. Law (2015).

<http://www.qaa.ac.uk/en/Publications/Documents/SBS-Law-15.pdf>

(last accessed 8 August 2016)

Strong, S.I., (2014) *How to write law essays and exams*, 4th ed, Oxford University Press, Oxford

Susskind, R., (2013) *Tomorrow's lawyers: An introduction to your future*, Oxford University Press, Oxford.

Webb J (2008) 'Threshold concepts: a new tool for learning law?' *Directions 17*, The Higher Education Academy UK Centre of Legal Education newsletter.

Whitehead, J., (1988) 'Creating a living educational theory from questions of kind, How do I improve my practice?' *Cambridge Journal of Education*, 19(1): 41-52

Wimshurst, K., (2011) 'Applying threshold concepts theory to an unsettled field: an exploratory study in criminal justice education'. *Studies in Higher Education* 36(3): 301-314

Wolf D. M. and Kolb D. A., 'Career development, personal growth and experiential learning', in Kolb, D., Rubin, I., and McIntyre, J., (eds) (1984), *Organisations Psychology, Readings on Human Behaviour*, 4th ed, Prentice-Hall, Englewood Cliffs, New Jersey

