Blended Learning in Practice

Summer 2018

Contents

Editorial

Welcome to the summer 2018 edition of our e-journal Blended Learning in Practice. In this edition we are pleased to be able to publish six research articles authored by participants of the Post Graduate Certificate in Learning and Teaching in Higher Education (PGCertHE) programme at the university.

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Within this edition:

Lindsay Bloxam investigates the experiences of Chinese learners in western academic environments. She discusses the tension between differing teaching approaches and proposes that a 'bridging pedagogy', to acknowledge prior learning styles and develop new teaching and learning strategies, may be key to supporting Chinese students more effectively.

Hui Yun Chan investigates the challenges of using Problem Based Learning, PBL, within the Law School to increase student engagement. This article examines PBL models in various fields in higher education and how it is used to develop and implement strategies that improve student engagement.

Laura Lo Coco discusses the challenges posed by troublesome knowledge in undergraduate politics learning. A literature review and a reflective analysis are undertaken. The author concludes that teaching styles that encourage reciprocal approachability are most effective in helping learners to comprehend threshold concepts.

Eleanor Squires asks what pedagogic teaching styles can be used to improve the attainment levels of Black and Minority Ethnic (BME) student nurses. Recommendations are made on

how Technology Enhanced Learning - specifically Lecture Capture and Flipped Classroom – can be utilised to adapt current pedagogic approaches and benefit BME students

Xenofon Tzounis has carried out a study to investigate the impact of two new approaches being implemented in dietetic student placement training, peer-assisted learning (PAL) and simulation. The study findings are discussed and recommendations for implementation are made.

Iiris Whitehead using information from two surveys, investigates how the student Library and Computing induction programme could be more effective. A pedagogic analysis with a focus on connectivism is used to make recommendations for how library staff can utilise newly gained time to improve students' experience in the transition to university.

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Contributor Profiles

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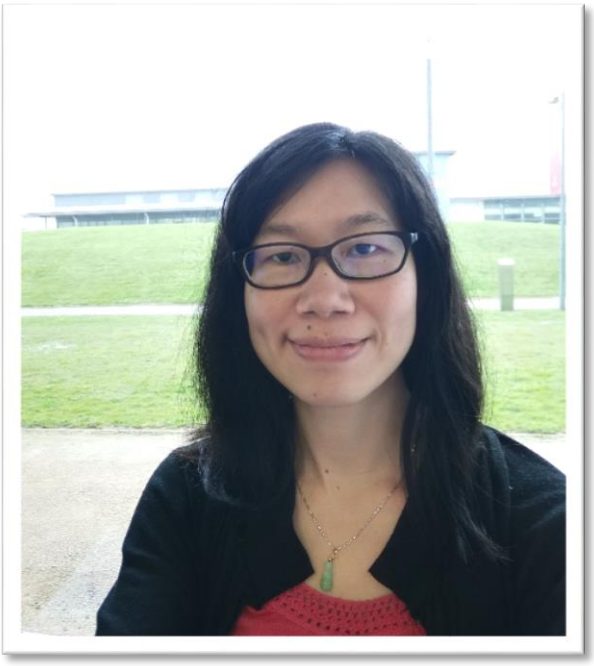
Lindsay Bloxam is a Senior Lecturer in Creative Arts and an award-winning designer. Her sculptural lighting designs have been exhibited internationally and she has been involved in a number of collaborative research projects, as well as creating large-scale public installations. Her work has been featured in a range of renowned design journals and books.

Over the past 10 years Lindsay has specialized in the teaching and support of international students. Her current research interests concern teaching and learning strategies which enhance divergent thinking skills, active learning and engagement within this group. In this issue of BLiP, she continues her research in relation to engagement and support for Chinese learners, considering this from a pedagogical perspective.



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Dr. Chan is a Lecturer in Law at the Hertfordshire Law School, University of Hertfordshire where she teaches Tort law, Research Ethics & Skills and Medical Law & Ethics. Her research expertise is in end-of-life decision making in health law. Her article for BLiP was influenced by her teaching experience on exploring ways to engage law students in learning actively through using additional support for problem-based learning in class.

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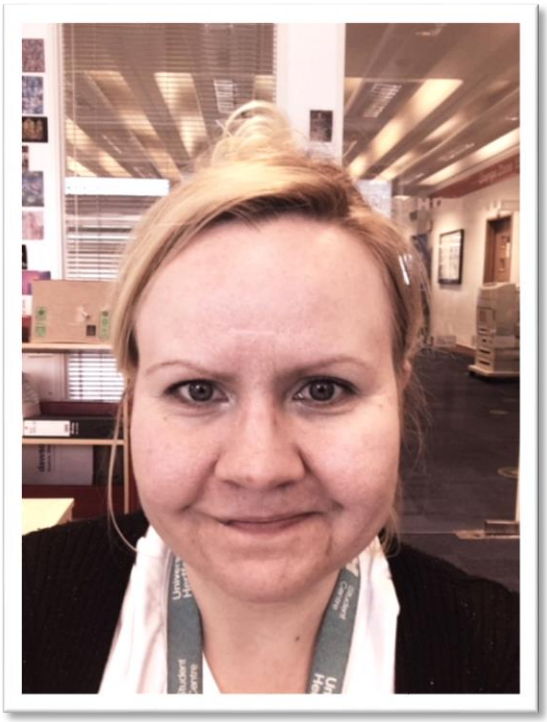
Dr Xenofon Tzounis joined the University of Hertfordshire as a part-time Lecturer in Nutrition and Dietetics in August 2017. He is a registered dietitian with the Health and Care Professions Council and works as a part-time Band 6 Bariatric Dietitian at a local NHS Trust, where he is also involved in dietetic student placement training. He has undertaken undergraduate studies in Food Science and Nutrition and has completed his PhD on the effect of flavonoids in human gut health at the University of Reading. His main research interest is weight management, behaviour change and the role of the gut microbiota on energy metabolism.



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Iiris Whitehead is a Training Co-ordinator within the Academic Engagement team in Library & Computing Services. She joined the University in 2008 and worked within the Helpdesk team for eight years. Iiris has been heavily involved in the organisation of library inductions for new students. Her remit also involves IT training for University staff, and she is currently engaged in the training and rollout of the Talis reading list system. Iiris is interested in how the use of technologies can help improve the student experience.

Identifying pedagogic strategies that facilitate Chinese learners to achieve in UK creative arts environments.

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Abstract

UK creative arts academics acknowledge that Chinese learners find working in Western academic environments challenging. If unaddressed, this leads to dissatisfaction and disengagement amongst learners. Literature review findings suggest that Chinese learners are disadvantaged due to a lack of critical thinking skills, autonomous learning and constructivist pedagogies favoured by Western educators. Findings show that constructivism offers the opposite approach to the Confucianist teachings of the East, and little is written about this from a creative arts perspective. Conclusions and recommendations propose that a 'bridging pedagogy', to acknowledge prior learning styles and develop new teaching and learning strategies, may be key to supporting Chinese students more effectively.

Introduction

Confucian pedagogies have proven highly successful in ranking China amongst the top performing countries worldwide in maths and sciences (Mullis et al. 2015; Leung, 1998). Yet there is evidence to show that when it comes to creativity, the Chinese lag behind their Western counterparts (Niu & Sternberg, 2003). The creative industries in the UK are expanding at twice the rate of the economy (DDCMS, 2016). UK Universities boast that their art and design courses 'lead the world' in creativity and innovation. University for the Creative Arts (UCA) proudly state on their webpage, Why Study in the UK? 'You will take an experimental and analytical approach to your work and will develop a critical and open-minded view. This way of thinking produces some of the most unique and highly employable graduates in the world' (UCA, 2017). QS World University Rankings show British and American art schools dominating the top global positions (Bridgestock, 2015). It is no wonder that increasing numbers of Chinese students' eager for successful careers in the creative industries arrive in the UK to study.

On arrival, it is often reported by Chinese students, that UK courses do not meet their expectations (Centeno et al. 2008; Bailey 2005; Jin & Cortazzi, 2006). Many feel confused and unclear about the educational experiences that they receive (Shaheen, 2016). Interviews conducted by Bailey (2005) at the University of Wolverhampton, demonstrate the frustration students feel about Western teaching and learning styles. “The teachers here don’t teach me anything,” (Bailey, 2005:1) says one student, “Most teachers in Britain won’t tell you the answer, they’ll just tell you how to find it”; “British teachers force you to study yourself, to work on your own.” (Bailey, 2005:10); “In China, we don’t need to hand in a lot of assignments.” (Bailey, 2005:13). A Chinese teaching colleague of Baileys’ announced: “You are lucky to teach in a British university…..You receive a much higher salary than lecturers in China, but you make the students do all the work. You don’t teach them anything.” (Bailey, 2005:1).

These expressions of concern from students are consistent with personal observations over a ten-year period. Frustrations are also expressed when discussing Chinese student’s issues with creative arts tutors at the University of Hertfordshire (UH). Lecturers report that Chinese learners lack conceptual thinking skills, often resulting in obvious and literal artworks, students are uncommunicative in critiques and group sessions, and struggle to learn independently. They are known to avoid taking risks and experimenting with new ideas and techniques. Shaheen, (2016) agrees that students’ lack of critical thinking seems to make them enormously confused in the British academic context, making it hard for them to cope. Bailey (2005:1) adds that complaints such as “The teachers here don’t teach me anything” refer not so much to the comparative emotional nurturing and moral guidance provided by UK lecturers, as to the lecture content and delivery methods used in UK Higher Education (HE) institutions.

So, in order to determine which pedagogic strategies, facilitate Chinese learners to achieve, we must firstly identify which pedagogies are classed as ‘best practice’ in the UK creative arts sector. We can then compare these to Chinese pedagogies, identifying where ideological differences may arise, which cause concern and create misunderstandings for students and lecturers alike.

Confucianism verses Constructivism

The Chinese look to traditional Confucianist theory (founded by Confucius in 551-479 BC) to underpin pedagogy (Leung, 1989). It’s underlying principles in relation to education are: social orientation rather than individualism, compliance and conformity, respect for superiors, effort as a route to attainment and an emphasis on ‘passing the test’ (Leung, 1989). ‘Confucianism is addressing some of the most acute problems that our education is facing today…. and is able to produce students that excel.’ (Leung, 1989:34). There is no

Chinese organization equivalent to the British Quality Assurance Agency for Higher Education (QAA), overseeing academic quality. However, there are several bodies who implement quality assurance and most are regulated by The Ministry of Education of the People's Republic of China. They are mainly concerned with administrative reform (Li, 2010), rather than pedagogical initiatives.

QAA establishes the academic standards that all providers of UK higher education are required to meet (QAA, 2017). A guide to 'best practice' can be found in the Subject Benchmark Statements, which form part of the UK Quality Code for Higher Education (Quality Code). The Subject Benchmark Statements for Art and Design 'are designed to encourage the development of a range of generic skills considered essential in the successful creative practitioner' (QAA, 2017:13), making specific reference to elements of constructivist pedagogy, including: enquiry-based learning, creative problem solving, peer critique, self-discovery, independent research, convergent and divergent thinking, experimenting, making critical and reflective judgements, analysing information and experiences etc. As a result, areas of constructivist pedagogy are commonly used strategies in creative arts teaching at further and higher levels in the UK. They are viewed in very high regard by Western educators, as 'The pedagogic model appears to offer a highly effective framework for the development of learner creativity and a genuinely transformative education.' (Dineen & Niu, 2008:50).

Constructivism refers to the idea that humans generate knowledge and meaning from their experiences. Hein (1991:2) states: 'If we accept the constructivist position we are inevitably required to follow a pedagogy which argues that we must provide learners with the opportunity to: a) interact with sensory data, and b) construct their own world'. The following sections of this paper aim to identify comparable elements of the two pedagogic strategies (constructivism and Confucianism), in order to identify key areas of pedagogy which cause particular difficulty or enable Chinese learners when coming to the UK to study. In the latter part of the paper, recommendations will be offered, based on its findings.

Social Orientation verses Individualism

Confucian philosophy emphasises harmony and integration or 'social orientation' (Yang, 1981) as opposed to 'individual orientation', the norm in Western cultures: collectivist ideals as opposed to independence and individualism. Yang (1981) describes 'social orientation' as a tendency for a person to act in accordance with social norms, rather than with internal wishes. This has serious implications for students who, in a UK creative arts setting, are asked to embody quite opposing characteristics.

The UK Quality Code states: '….skills considered essential in the successful creative practitioner' include personal innovation, risk-taking, independent enquiry, negotiation,

interpersonal management, self-management and critical engagement' (QAA, 2017:13). Over the duration of the course, students are expected to take increasing 'responsibility for the content and direction of their own creative work.' (QAA, 2017:14). 'Out of box' or divergent thinking is not only encouraged but expected, the aim being a portfolio which demonstrates highly individualized and unique artistic outcomes (UCA, 2017).

As students in China are expected to operate within social norms and follow the tutor's instruction, independent divergent thinking is not encouraged or tolerated (Yang, 1981). This means that in order to succeed, the student must develop a totally new skill-set for studying in Britain.

Compliance and Conformity verses Critical Thinking

In Chinese academic traditions, students are expected not to be out-spoken and question authority (Shaheen, 2016; Leung, 1991). "I wonder why the Europeans always try to doubt what the others said by critical thinking" said a student in Bailey's study, "In my traditional culture, we prefer believing what we saw and heard in the books and media" (Bailey, 2005:11). Personal observations conclude that students with this view find conceptualizing their practice particularly challenging. The emphasis on given knowledge means that less importance is placed on discussion-based learning, creative thinking or stating personal opinions.

Western creative arts educators, by contrast, believe that innovative, lateral and critical thinking are closely related concepts, and seen as vital to achieving unique and personal creative outcomes (QAA, 2017). (Markman, A. Wood, K. 2009:26). 'To enhance 'out of box' thinking, UK students are challenged to take creative risks and 'break the rules'. Workshop activities encourage the students to create purposeful accidents in order to identify new and unforeseen potential, leading to new artistic possibilities. Through participation, the students engage in the process of conceptual development by broadening their ability and confidence to ask questions, form judgements, develop ideas and recognize creative solutions. Conformity can crush this endeavour and lead to literal and clichéd artistic outcomes.

Passing the Test verses Authentic Assessment

Confucian pedagogy favours repetitive learning and memorizing styles which help students to achieve high grades in standardized tests (Jin, L. Cortazzi, M. 2006). Value is placed on success in examinations where students demonstrate their mastery of the knowledge gained from the teacher/textbook, and creates a significant incentive for study (Leung, 1989). In contrast, 'authentic assessment' (IUB, 2017) is the preferred method of assessing in Western creative art's contexts. Marks are awarded for applying essential knowledge and

skills to contextualized tasks which are useful in the real world i.e. a portfolio, presentation or exhibition. The method requires the student to think creatively about how to solve the assessment task, something a standardized test would not have the ability to measure.

The Quality Code states: 'Assessment strategies support students' understanding of their learning processes and are designed to foster a deep approach to learning. Strategies also promote autonomous learning and self-evaluation, which are vital elements within the overall learning process' (QAA, 2017:14). However, Chinese learners can find 'authentic assessment' challenging, if they have been taught to focus purely on exam success: 'It is generally acknowledged that a focus on examinations inhibits creativity through increasing anxiety and fear of failure. This, in turn, lessens intrinsic motivation and the willingness to experiment or take risks' (Dineen & Niu, 2008:43), which is a key element to creating a successful portfolio.

Memorization and Practice vs Student Centered Learning

According to Confucius, all learners, whatever their IQ, can achieve high standards collectively through memorization (Leung, 1991). In a Chinese art and design context; demonstration, modelling and repeated copying are strategies employed to enhance skills-based knowledge, highly valued in Chinese art (Jin & Cortazzi, 2006). Constructivism holds an opposing view, that education's primary aim should not be the transmission of knowledge, but putting the student in the centre of their learning experience. Student-centred learning is a teaching method where the focus of instruction is shifted from the teacher to the student, in order for 'active learning' to take place, allowing the student to take responsibility for their own advances in education (Nanney, 2017).

Student-centred learning is achieved in British art and design institutions in a variety of ways. One very common framework is the 'critique'. This is a communication event, where students are required to be active participants and are given the opportunity to share ideas and receive feedback/feedforward on their practical projects. All participants are required to reflect on practice, analyse, problem solve and state opinions in order to aid artistic progression. Chinese learners may fail to see the value in this activity, as they may not understand it's relevance. If disengagement occurs and the student does not fully participate, the required learning from the process will not be achieved. This in turn will reflect in weak underdeveloped conclusions in the student's portfolio, and result in low grades.

Respect for Superiors verses Facilitation

Confucianism teaches obedience and respect for superiors: 'If your superiors are present, or indirectly involved, in any situation, then you are to respect and obey them' (Leung,

1991:27). The opposite is true of constructivism, where student-centred learning is seen as a vital component to creating independent-minded learners (Dannels et al, 2008). “In China, we have to follow the teacher…the teacher will tell us what to do, which book to read...In the UK, we have to follow our own mind, be independent” (Bailey, 2005:9). QAA states in the quality code: ‘In an effective learning environment, staff and students create a community of practice as partners in the process of learning’.

This QAA requirement is reflected through group workshops and peer-led activities. The lecturer’s role in the process is to facilitate the discussion, and whose views are on an equal footing to those of the student. It has been observed that Chinese students often show a reluctance to join in class activities of this kind (Zou, 2005). Disengagement is common in peer-led discussion, but Chinese learners return to full engagement when the teacher speaks. An interviewee of Bailey’s (2005:12) states: “Why should I listen to my classmates’ mistakes? I want to hear what the teacher has to say.” Bailey (2005) explains that this reflects a focus on accurate knowledge imparted by the lecturer as the main goal of education. Constructivist pedagogy emphasizes the process of creative thinking and on fostering the skills of enquiry necessary for independent research. Thus, the aim is to encourage peers to verbalize their thought processes rather than to elicit a ‘right answer.’ Chinese students, however, may be afraid to respond in case they get the answer ‘wrong’. This can result in Chinese learners lacking the skills of critical debate and the confidence to provide conceptually robust, unique and ambitious outcomes.

Conclusions

From the literature review, it appears that constructivist pedagogy teaches an opposing view to Confucianism, and unresolved pedagogic issues exclude students from opportunities to achieve their full potential (Jones & Brown, 2007). Chen and Bennett (2012) argue that constructivist pedagogies do not offer international students sufficient support. However, the literature review advocates constructivism as the most successful approach in teaching high level creative practice. Exploring a variety of teaching approaches practiced over a ten-year period, has shown that it is possible to step from one pedagogy to the other. Constructivist pedagogy in and of itself is not the issue, it is the way in which it is delivered to Chinese students that creates misunderstanding and disengagement. ‘In a world where global perspectives must be considered in all kinds of contexts, higher education can no longer be immune from change and instead, should be leading it’ (Jones & Brown, 2007).

There is evidence to show that on arrival in the UK, Chinese students have a lack of knowledge of British education conventions (Liu, 2010) and as a result, are likely to frame their learning within a Chinese culture of learning. Therefore, Confucianist thinking will inform the way in which they interpret the format of studio instruction in the UK (Jin & Cortazzi, 2006) and ‘… determine the quality of learning that might subsequently take place’

(Biggs, 1996:348). In order to address this, the paper proposes a set of recommendations which bridge the knowledge gap between traditional Confucianist thinking and the more activist approaches favoured by the West. A bridging pedagogy would provide students with the skills to undergo a more successful transition.

Ryan (2004:167) suggests that: 'as academics have sought to handle large numbers of international students, especially from Asia, the presumption that learning styles and cognitive approaches in higher education were homogenous and universal has been severely challenged'. If Chinese learners are ill-prepared for the unfamiliar pedagogic practices they encounter in the UK (Niu & Sternberg, 2003), British academics must work consciously to meet their needs (Shaheen, 2016). The literature review establishes the key areas of constructivist pedagogy which challenge Chinese learners. So, how do we accommodate them within the UK creative arts system more effectively?

Recommendations

The recommendations set out initial ideas of teaching practices which can form a bridging pedagogy. These practices are informed by the literature review, and ten years of personal experience developing and refining courses for international students. Much of the strategy has been tried out in studio environments by the author. This paper could inform a further study, to test student responses to the ideas set out below. These recommendations may also be useful when teaching 'home' students and mature students, who may enter HE from more prescriptive backgrounds.

1. Induction

Unmet expectations risk increasing frustration and disengagement levels amongst Chinese students entering UK creative arts programmes. A well-designed Induction activity can clearly expose the expectations for both the lecturer and learners, and form a basis for discussion around cultural differences in pedagogical practices. Practices developed by the author show that early alteration of the student's expectations, increases levels of engagement and student satisfaction.

2. Content and Curriculum Design

As Chinese learners come to the UK with different forms of prior knowledge, curricula should acknowledge non-western approaches, which go further than tokenistic research examples. Projects which lead with skills-based tasks, as opposed to thinking processes would acclimatize the student more effectively. Once the student gains confidence, creative thinking approaches could then be introduced.

To address the issue of compliance, and promote individually as an essential component to enable artistic potential, curricula can be developed to lead the students through a 'stepped' process of creative learning. Specified tasks designed to give the students an experiential understanding of what creative practice entails: divergent thinking, experimentation, developing an idea and 'risk taking' in a creative context, are likely to enhance creative development of the individual learner.

To mitigate the risk of the learner expecting passive transmission of knowledge, the curriculum can provide higher structure/fact ratios initially with very clear definitions, explanations and examples at the start of a creative project. Highly targeted tasks around deep learning, critical thinking and active learning are likely to align the learner to a new way of thinking and form understanding of a more speculative and questioning nature.

3. Delivery

To address the hierarchical and formal relationship Chinese students will expect with their teacher, activities and tasks could be structured and tutor-led at the start, to instill confidence in the lecturer's knowledge and avoid disengagement. Regular written feedback/forward by the lecturer (rather than peers), giving detailed instruction on independent study tasks are likely to promote further entrenchment in the process.

A lack of confidence in self-expression and doubting their knowledge, are the two main factors that prevent Chinese students' involvement in speaking activities. Trials by the author show that frequent and inclusive discussions around topics familiar to the student, are likely to increase confidence levels. Engagement is further increased when students experience that their contributions are shown by the lecturer as valuable to the debate. Initially a tutor's presence would help to support the engagement levels of the Chinese learners, and once confidence in the process is established, could transition to peer-led activities.

To address the lack of criticality displayed by Chinese learners, a list of structured questions can be developed to guide students through the thinking processes required to elicit divergent thinking. This knowledge is likely to be tacit for UK students, but will need to be taught explicitly to Chinese learners.

4. Assessment

To reduce the risk of incorrect assumptions being made about what is being tested in an authentic assessment task, clear examples can be shown to the students i.e. a portfolio. Discussion will enable the link between practice, and its relationship to the assessment

criteria. How grades are awarded for thinking processes, risk-taking, experimentation and independent research, will highlight its importance, over memorization of facts.

The author combats misunderstandings around assessment processes by providing Chinese students with an experience. Students are required to partake in a formative assessment task linked to current project work, in which they must respond to real criteria on the same assessment form that is used in the end of semester assessment, to ascertain whether their portfolio is meeting the requirements. As well as enriching the student's understanding, it also enables the lecturer to see clearly if the student has understood the process. This greatly reduces the risk of incorrect assumptions being made about what is being tested in an authentic assessment task.

Limitations of the Study and Suggestions for Future Research.

It has not been possible to formally confirm the impacts of the above recommendations that are set out in the paper. However, the paper does provoke questions for further study. Using the recommendations as a starting point, a follow-on study could be designed to test student responses and ascertain the effectiveness of a bridging pedagogy.

Pedagogy is just one issue affecting students' engagement, satisfaction and attainment rates, and forms part of a wider and more complex issue. Factors which may also affect a student's predisposition to transformation, which have not been taken into account in this paper are: low English language levels, culture shock and student's motivations for study. All of which are suggestions for future research.

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Chinese students' expectations of their teachers and implications for UK HE providers.

Problem-based learning approaches in improving and incentivising student engagement in law workshop

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Abstract

Student engagement is important in higher education, with various challenges ranging from unmotivated to ill-prepared students, consequently leading to poor learning. Various pedagogic strategies were developed to address this challenge. Problem Based Learning (PBL) is increasingly used in teaching within legal education, and is particularly appropriate to develop student skills in resolving legal issues. Lack of student engagement is identified as one of the key obstacles in effective learning at the Hertfordshire Law School. Although workshop questions are structured in a blend of PBL and open-ended questions to stimulate discussions, students often failed to engage with the tutor and the materials in two-hour workshops. This study examines PBL models in various fields in higher education to develop strategies that improve student engagement. The initial survey revealed that student engagement is higher where there are incentives, such as graded in-class assessments, or a summative piece of assessment. Failure to link a PBL approach to tangible learning outcome in workshops, for tasks being rewarded with grades, particularly in an assessment-rich learning environment would mean that students have little incentive to engage in class. A well-structured PBL should include such elements, without which student engagement would remain poor.

Introduction

Student engagement continues to be an important area in higher education, (Kahn, 2014) with challenges ranging from ill-prepared, unmotivated to disengaged students, resulting in poor learning. Various pedagogic strategies have been proposed to address this challenge; including Socratic style questioning method (Elder et al, 2011), pairing students for brain-storming responses followed by class discussion; encouraging students to draw concept maps in groups, using incomplete handouts for students to complete as they participate in class, using Problem Based Learning (PBL) models; and short assignments utilising simple worksheets and readings to stimulate engagement with the materials (King's Learning Institute, 2017).

PBL as a pedagogy is increasingly used in law tutorials, and is particularly appropriate to develop student skills in resolving legal issues (Flagg, 2002; Orji, 2015). In contrast to

previous research on PBL as a learning pedagogy, this paper explores the design of relevant teaching and learning activities *within* PBL that stimulates and improves student engagement in class. It does so by surveying PBL models in disciplines within and outside of law and considering various strategies in engaging students in two-hour law workshops at Hertfordshire Law School. Although PBL is employed in workshops, student engagement is generally poor, thereby creating a poor learning experience for students, and frustrating teaching progress. Primary examples include lack of preparation, the failure to grasp the basic contents of pre-recorded online lectures before attending workshops and the lack of motivation to prepare any answers to the questions distributed to them prior to the session.

It is significant to note that while PBL offers a starting platform to engage students, relying solely on it without effective scaffolding and encouragement would not necessarily achieve the desired outcome of engaging students in their learning and promoting active learning. Without this understanding, well developed PBL may fail to gain student engagement, due to influential factors in students' prior experience, motivation, background, curriculum design and activities (Jovanović et al, 2017). The discussion below reveals some insights into improving student engagement using effective PBL as applied to law workshops. First, I consider relevant learning pedagogies aimed at improving student engagement, focusing on PBL approaches. This is followed by an assessment of the PBL variety that is applicable to law. I then conclude with some recommendations.

A survey of PBL pedagogic theory and applications in other educational fields

Chickering and Gamson (1987) rightly observed that learning is not a spectator sport, consequently, students who are engaged learn actively. However, effective learning will not occur where the pedagogy is ill-suited to the learners' style. Pedagogic theories that support active learning include PBL, Bloom's solo taxonomy, flipped learning, and Gardner's multiple intelligence approach. PBL is unique in its application to student engagement because it incorporates key active learning approaches – listening, communicating, reading, writing and reflecting on the problem posed. An active learning approach has its roots in classical educational theory, particularly the constructivism concept attributed to Piaget and Vygotsky. Constructivism generally refers to learning through knowledge construction, either individually or socially, and fits well with the PBL method (Kemp, 2017). Cognitive and social constructivism (Lourenço, 2012) is comprised of rich concepts that demonstrate elements requiring student engagement, such as creating learning spaces that fosters team work, taking ownership of learning responsibilities, mutual communication exchanges, generating ideas and questions, thinking and organisational skills, building prior knowledge, and clarifying misconstruction of knowledge, thus reflecting real-life scenarios. It connotes a learner-centred approach, embracing elements that facilitate active learning where the process is not necessarily isolated, because the key feature of social and cognitive constructivism is creating supportive learning communities in developing individual

cognitive skills. Thus, this characteristic, when translated to PBL settings, displays elements of student collaborations, appropriate curriculum design (scaffolding learning materials) and tutor experience (Bridges, Corbett and Chan, 2015; Mayes and de Freitas, 2004).

Amador and Mederer (2013) gave an extensive account of the PBL literature in the sciences, engineering, architecture, computer, nursing, chemistry, education, law and social sciences disciplines. The relationship between behavioural and cognitive learning theories in fostering active learning as a foundation for PBL has also been explored in the literature (Kim, 2014). PBL, modelled after real-life scenarios, originated from medical schools in the US and Canada in the 1960s and 1970s (Clough and Shorter, 2015). It emphasises the significance of learners as the constructor of knowledge and tutors as the facilitators. Rather than merely receiving information imparted by tutors, this approach encouraged self-directed learning in group work, increasing student confidence and competence in resolving questions through various knowledge sources, as well as promoting critical inquiry, analytical thinking, communicating and idea sharing (Charlin, Mann and Hansen, 1998; Kim, 2014; Clough and Shorter, 2015), hence igniting higher level order of thinking as seen in Bloom's taxonomy (Bloom, 1956).

PBL thus provides transferable employability skills, meeting the university graduate attributes. This is particularly relevant where the Subject Benchmark Statements prescribe a list of skills and qualities of mind that a law graduate with honours will need to demonstrate, including the ability to conduct self-directed research using a range of appropriate sources, producing a synthesis of relevant doctrinal and policy issues, presenting a reasoned choice and critical judgement of the merits of particular arguments, in addition to being able to communicate orally and in writing. PBL as a strategy used in teaching and learning the law would thus include a range of assessment methods for law students, such as essays and reports, case notes; statutory interpretation; oral presentations, moots; skills-based assessments, research project/dissertation; and work/clinic-based assessments (QAA, 2015), in alignment with the UKPSF for teaching and supporting learning (Orji, 2015).

Typical PBL formats require individual and group work, with small groups of four students to make learning effective, giving the opportunity for discussion, collaboration and communication exchanges. The students would resolve the problems presented in the questions in groups, followed by whole class discussions. Students are expected to contribute in making PBL a success, such as researching and being prepared for sharing ideas in group or class discussions and participating actively (Azer, 2011; Kim, 2014). PBL benefits learners by fostering deep learning, promoting different learning methods, encouraging more likelihood of using library resources, and allowing students to have stronger knowledge-application skills (Wright, Wickham and Sach, 2014).

There is reason to suggest that different content designs and activities in PBL effectively engage students, as illustrated by the following examples. A survey on nursing students in tutorials found that student engagement reciprocates tutor engagement, which influences the classroom dynamics (Elder et al, 2011). Students in criminal justice practice and education used PBL style in discussing various crime scenarios, simulations and case methods (Kim, 2014). Dental students used concept mapping in PBL to foster inquiries and bridge links between central concepts (Bridges, Corbett and Chan, 2015). Pursuant to the concept mapping approach, students are grouped and allocated with topics where they would brainstorm them individually using post-it-notes and collated onto a list on the lecture room wall. The mapping began when the notes are organised into connected links, forming concept maps on the wall. Students then would go around and view the other groups' maps. They found the activity improved their decision-making process and group communications.

Another example involves the module of environmental science, management, wildlife and conservation biology major. Tutors who teach soil science in this course applied typical PBL format, by dividing the students into groups of four or five who worked together on sets of problem questions delivered to them in stages (Amador and Mederer, 2013). The distinctive part comes in the way PBL is conducted throughout the term. In the first session, students discussed in groups and as a class, finding the information necessary to answer the problems. The information is then presented in answer format to the class, followed by tutor-facilitated class discussions. The second part of the problem was released to the students, where they would resolve them similarly. This shows an incremental progression of PBL. Finally, students would write a group paper explaining the answer to the problem (which is assessed), followed by in-class multiple choice exams. Each student would have the chance to grade each other's contribution to the group anonymously through peer evaluation, and the grade would contribute towards the groups' final paper grade. This approach ensures that students understand the importance of participating throughout the tutorials, which are assessed at the end of the session.

This model is similarly utilised in two examples from law tutorials. In a Constitutional Law class tutorial, questions with gradual levels of complexity are allocated to students in groups of four, where they would produce written opinions to resolve the problems over several weeks in the semester, including tutor consultation to track their progress (Flagg, 2002). Students would gather to evaluate the submissions at the end of term. This model differs from the conventional "Socratic" pedagogy, where students demonstrate a mastery of the subject at the end of the course in single examinations (Flagg, 2002). This approach, as Flagg (2002) pointed out, often overlooks student learning in classrooms and may not suit learners of various learning styles.

On the other hand, students in a property law tutorial adopted a 'law firm' PBL method (Orji, 2015). They are first introduced to the subject in lectures in the first week of the term

before PBL questions are distributed to them. Students select their own team members similar to a 'law firm', where they would present arguments to different teams to resolve the problem. Following oral submissions, tutors and students would provide feedback to the presenting groups. Each week entailed a different question that required further understanding on another aspect of property law, gradually building an understanding of property law necessary to resolve the problem. Group written submissions, along with individual and shared notes are graded indicatively, allowing the tutor to assess individual and group strengths. The submissions are then returned to the students with constructive feedback which they would need to act upon.

Despite the benefits of PBL, some law students surveyed in a study disagreed that PBL enabled them to apply critical analysis in legal problem-solving (Clough and Shorter, 2015). The authors identified important reasons for lack of engagement, including personality (shyness), not motivated to learn, poor preparation or understanding. These findings are not entirely new, as the literature provides examples of wide ranging factors influencing student engagement generally, such as classroom design (Imms & Byers, 2017), socio-economic identity factors (Thiele et al, 2017), personal motivation (Cai & Liem, 2017) or the inclusion of an assessed component as part of the curriculum design within an autonomy-supportive learning approach (Reeve, 2006). On the other hand, while there is consensus on the efficacy of PBL, there is less clarity as to how to motivate students who would be unwilling or unmotivated to participate in resolving the PBL problem presented to them. Kim (2014) identified several challenges tutors faced in implementing PBL, such as creating a collaborative classroom where all students participate, by reminding them that the grades for the group would depend on the work put into it by the group members, and fostering a responsibility to help each other in resolving the problem. Another way of encouraging motivation is through creating online forums for students to collaborate with their peers in the learning process (Lim, 2005). This would require an induction on best practices in online discussions and how to generate productive dialogues.

Two important points emerged from the preceding discussion. First, the PBL assignment is designed to not only support active learning, but to sustain student engagement in each tutorial, with specific tasks and learning objectives, culminating in a graded assessment at the end of the term, taking into account individual and group contributions. Thus, providing incentives to students motivates their in-class engagement. Failure to link classroom engagement to assessment would mean that students have little incentive to learn actively and participate in discussions. Second, different topic and information in the subject were presented incrementally and coherently throughout the semester, enabling the students to appreciate the importance of each topic within the subject, providing students with a more complete picture of the subject. As Orji (2015:377) correctly noted, 'complete legal education would imply that students are engaged in active rather than passive learning, and are enabled to develop intellectually by means of significant study in depth of the relevant issues in the given problems.' It is often assumed that PBL is valuable, but the way that it is

structured needs to be considered carefully, as it would not automatically achieve student engagement if applied unsystematically.

Engaging students in law workshops: implications for practice

The literature suggests that arising from the various activities within and surrounding PBL approach in the literature and lessons from research outside of law, there are several strategies that can be incorporated into law workshops to stimulate student engagement. One of them is providing manageable information as scaffolds to student learning, allowing them to engage with the topic without being overwhelmed by it. Jonassen (2011) and Bate and colleagues (2014) emphasised the significance of scaffolding the learning process, with clear learning expectations, preparations, support and assessment outcome for effective learning. Particularly, case studies, simulation, alternative solutions or argumentations provide the necessary scaffold for ill-structured problems while causal reasoning should support well-structured problems (Jonassen, 2011). The current required reading for each workshop consists of four to five cases, and one to two academic articles on the topic or commentary on the cases. Legal cases are generally long, offering different points of reaching the decision. Tutors can signpost the focus of the cases to the students and then divide the class into groups to work on different judges' reasoning in the same case, followed by class discussion. During the activity, students could map the cases as concept maps on the wall and thus build a picture of each of the judgments into a whole case, supplemented by tutors' commentary on the analysis. Having this background knowledge of the law would then help students apply their knowledge to the problems posed in the class. This would necessitate the activities to be spread over two to three weeks, building students' knowledge leading towards answering the problems posed.

Another option to engage students to contribute in class is to provide them with incentives to be an active learner. As demonstrated by the examples above, knowing that the activities would be graded affects student participation and engagement in the assigned tasks. Some students may hold the view that their contribution does not correspond with their grades; thus if the tasks were to be treated as an independent, graded course (Alves et al, 2016), this would affect how students perceive the value of their contribution in class. This observation is similar to several conversations I had with my final year students who are of the view that there is little incentive to be prepared and to participate in class because they only need to focus on their written coursework that formed the summative assessment. Incorporating some components of graded assessment into the workshops, such as class participation, would potentially offer a starting point for promoting student engagement in class, either individually or in groups where they are expected to contribute. This approach is also consistent with student expectations to be prepared prior to coming to workshops, having watched the online lectures the week before following the flipped classroom model. Such models can only be effective if the students engaged with the materials and are able to apply it in the workshops, supported by the PBL model.

Integrating graded assessments into class is not entirely new. Kirton and colleagues (2014) provide insights into engaging chemistry students to learn actively in class and improve their generic, practical and laboratory-based proficiency through authentic assessments. Similarly, studies in geography, biochemistry and social work reported increased student engagement in modules with frequent summative assessment and assessed group presentations (Holmes, 2015; Vanderlelie & Alexander, 2016; Morley & Ablett, 2017). There is much force in introducing similar activity to support the existing PBL approach in law workshop, particularly, where law students are expected to acquire competency in, among others, oral presentations, legal reasoning and the ability to synthesise doctrinal views (QAA, 2015). Students would thus realise the importance of acquiring and demonstrating these skills, which are linked to assessment. Law workshops could include impromptu group presentations to boost student learning and engaging through spontaneous collaboration (Thompson, Switky and Gilinsky, 2012). Thompson et al (2012) suggested several grading strategies, one of which is to treat class participation as one of the grades, either individually or collectively, corresponding to the amount of work required for the presentation. Applying it to a law workshop, this would denote allocating grades for individual or group contribution in resolving the legal issues and presenting the answers to a PBL question in class.

Team work and idea sharing in the learning processes, which are often unrewarded, would now be recognised as contributions to the group work; a view similarly shared by Kirton and colleagues (2014). This approach would also address some of the problems associated with PBL group work, in terms of group dynamics, particularly the variation in discussion dynamics owing to diverse personalities comprising of outspoken and shy students (Chang, 2016). A graded component becomes crucial where students would now perceive engagement as essential. In fact, the various PBL models surveyed above suggest that where students identify that the activity and participation would be graded; the grades become an incentive for them to engage, and encourage them to contribute to class activity.This is also supported by a study on improving student attendance and quality of tutorials in law where 67% of the students responded positively that they would change their attitude towards tutorial attendance if attendance was counted towards assessment (Baderin, 2005).

Overall, the strategies are developed with the aim of improving student engagement, including attendance and the motivation to engage with the learning, thus affecting the learning outcomes and the effectiveness of the learning process. Incorporating ways to support the PBL model has the potential to increase student engagement in class, while making better use of the resources available, such as flipped learning, and online learning environment, features that already formed the learning pedagogy in the law school. Incentives in the form of rewards or grades for class participation and assessment in workshop help ignite the motivation to learn. There is thus reason to believe that the approaches discussed above would stimulate student engagement in a coursework-rich learning environment as the Hertfordshire Law School.

Conclusion

This paper has examined various PBL models and activity designs in different fields in higher education in order to develop strategies that improve student engagement in law workshop. The findings showed that student engagement is higher where there are incentives, which could take various forms, such as graded in-class assessments, either for individual participation or group contribution. Another key finding is that the subject content ought to be introduced gradually, with relevant information acting as scaffolds to help students manage the tasks, eventually leading to a summative piece of assessment. Failure to link a PBL approach to tangible learning outcome in workshops, for tasks being rewarded with grades, particularly in an assessment-rich learning environment would mean that students have little incentives to engage in class. A well-structured PBL exercise should include such elements, without which student engagement would remain poor.

Drawing from the strategies available from the fields of sciences and law, I have proposed several ways that can be implemented in law workshop to facilitate and improve student engagement, which enables students to learn actively using the PBL pedagogy. Activities that help make PBL questions and materials more engaging include allocating students into groups through 'law firms' designs from an early stage, thus identifying and familiarising them with real-world, legal team-based work; gradually introducing the topic through specific tasks and well signposted preparatory reading materials; and incorporating concept mapping, thus dividing the burden of reading long cases and materials and encouraging information exchange and building new knowledge on prior information. Reminding students of the importance of being active contributors in class and that their effort would be similarly rewarded with grades would lead to an attitude change from passive to active learners. These proposals are steps towards cultivating a more engaged learner, particularly, the unmotivated ones, and encouraging the already engaged students to achieving a higher level of learning.

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Overcoming troublesome knowledge in threshold concepts learning: the case of theoretical reasoning in undergraduate political studies

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Abstract

This paper investigates the challenges posed by troublesome knowledge in undergraduate politics learning. Theoretical reasoning is taken as the chief example of troublesome threshold concept in politics, and the problem of crossing the 'liminal space' is discussed. The pedagogy of games is offered as a model for overcoming the learner's anxiety in crossing the threshold. A literature review on the pedagogy of games suggests that games make the liminal space less problematic. First, during a game the tacit rules of reasoning are uncovered and become the rules of the game itself. Second, the humorous environment reduces learners' anxiety in dealing with troublesome knowledge. Reflective analysis on two episodes in an undergraduate class corroborates the finding of the literature, and highlights one further element of game and playfulness that makes the rite of passage more pleasant and productive: games are also a gateway for social cohesion and reciprocal trust, increasing the intimacy among students through playful teasing and imagination. The paper concludes that teaching styles that encourage reciprocal approachability are most effective in helping learners to comprehend threshold concepts.

5 keywords: threshold concepts, liminal space, theoretical reasoning, games, active learning

Introduction

Philosophical enquiry is a central feature of political studies. To achieve command of the discipline of politics, learners must engage successfully with a series of threshold concepts that are often troublesome in that they appear alien or counter-intuitive (Meyer and Land, 2003: 419). Threshold concepts are troublesome because they are rarely made explicit by practitioners and because they involve the reconstruction of the learner's subjectivity. In this investigation of the challenges posed by troublesome knowledge in undergraduate

politics learning, I take the concept of theoretical reasoning as a method of acquisition of political knowledge as the central case of threshold concept in politics.

Theoretical reasoning is the method of acquiring knowledge based on the assessment and weighing of reasons for believing some assumptions or others. Threshold concepts and the example of theoretical reasoning are defined and introduced in Section 2. The issue of troublesome knowledge is raised, and examples of how theoretical reasoning might be troublesome are offered. As a threshold concept, theoretical reasoning constitutes a gate to the mastering of the discipline, and its comprehension demands that the learner crosses a threshold of understanding through what is generally referred as the 'liminal space.'

The liminal space is defined in Section 3, and the pedagogy of games is offered as a model for overcoming the learner's anxiety in crossing the threshold. Two elements of play as a learning process are suggested to be central to the understanding of threshold concepts: the comprehensiveness and unity of the experience of play, and the element of humour. A literature review on the pedagogy of games suggests that games make the liminal space less problematic to inhabit for learners. First, when playing a game, the tacit rules of reasoning are uncovered as they also become the rules of the game itself. Second, the humorous environment of games reduces the anxiety generated by the realization that our world view might be mistaken. These features of games and playful enquiry make it possible for the learner to be free to experiment, create, and apply new meaning and interpretations of events and rules in a non-serious but nevertheless intense environment.

In Section 4, I conduct reflective analysis on two playful activities carried out in an undergraduate class in political thought: a game representing the state of nature – a hypothetical situation representing human beings' interaction before societies came into existence, and a discussion conducted with the Socratic method. The outcome of the analysis confirms the benefits of play as a learning activity conductive to the understanding and command of threshold concepts. Moreover, it suggests that teaching styles that encourage openness and reciprocal approachability in a safe environment are to be preferred, because they reduce the anxiety that students may feel approaching and experiencing the liminal space.

Theoretical Reasoning in Political Studies

Threshold Concepts

Threshold concepts in political studies are held by political scholars to be central to the achievement of deep understanding and command of their subject (Meyer and Land, 2005: 5). They allow for the learners' acquisition of forms of thought and expression typical of the discipline, as well as distinctive of academic thinking. Threshold concepts are "akin to a portal, opening a new and previously inaccessible way of thinking about something" (Meyer and Land, 2005: 3): the comprehension of a threshold concept is thus a transformative

event in the learners' way to think about a discipline, or the way they experience particular phenomena in the discipline.

For example, in undergraduate political studies, learners are confronted with the concept of theoretical reasoning as a method to acquire knowledge. Theoretical reasoning is concerned with the question of what one ought to believe about certain facts and explanations. It relies on a deductive method based on the assessment and weighing of reasons for believing some assumptions or others, comparing the reasons for and against conclusions we might draw about how the world is, and striving for consistency between beliefs (Wallace 2014; Harman 2004: 47). Theoretical knowledge in politics is best understood in contrast to empirical knowledge, which relies on the inductive method of drawing conclusions from experience and experiments.

Theoretical reasoning in politics is employed, for example, when we ask whether morality is objective or not. Different answers to this question may lead us to re-evaluate our beliefs on whether a state can push for policies based on a specific world-view, or whether it should solely be concerned with the resolution of conflicts between its citizens' contrasting and equally valuable conceptions of justice. It may seem that these questions can be answered using an empirical method: do we observe consistency in people's belief of what is morally right? However, empirical analysis does not lead us to reliable conclusions on the nature of morality. This becomes clear once we consider that individuals may be mistaken about their own moral beliefs. The fact that people all over the world disagree on whether homosexual couples should be permitted to marry is not an evidence that there is no objective truth about how the state should treat homosexual couples. It is merely a proof of the fact that people disagree about our moral and political obligations towards them.

Theoretical reasoning is transformative because once learners understand this new line of reasoning they become able to ask new questions about rationality, coherency of world views, the nature of true statements about the world, and the limitation of human knowledge. Learners are confronted with a concept that demands a radical re-evaluation or distortion of "parts of their common-sense understanding about the world" (Booth 2006: 174). Theoretical reasoning is also an essential skill to effectively join the community of political thinkers. It represents a gate to the mastering of the discipline and it is often assumed by practitioners to be foundational to any kind of enquiry in the field of politics (Davies 2006: 71).

Theoretical Reasoning as Troublesome Knowledge

The challenges posed by threshold concepts such as theoretical reasoning are determined by the extent to which concepts constitute troublesome knowledge. Theoretical reasoning is troublesome knowledge for two reasons. First, because it is taken for granted by practitioners, it is rarely made explicit in debates and literature on politics (Booth 2006: 172). The idea of theoretical reasoning as opposed to empirical proof operates at a deep

level of understanding, often presupposed by empirical analysis as well. As we conduct empirical analysis on the level of participation to general elections, for example, we implicitly assume that high participation is desirable. The assumption that high participation in political elections is desirable, is a product of theoretical reasoning on the value of openness and publicity of political debate in liberal political thought. When undergraduate students face the task to evaluate general election data sets to understand the levels of political participation, they are encouraged to question the basic theoretical assumptions on the value of political participation. Nevertheless, the question of whether and to what extent political participation is desirable in liberal democracies falls outside the scope of the task of analysing data sets for the general elections, and it is often implied in the academic literature regarding data analysis. A second way in which theoretical reasoning is troublesome is that to acquire it the learner must personally reconsider the limits of empirical proof and of human knowledge, eventually undergoing a deep world view transformation. That most accomplishments in political studies – and, arguably, in every other field of human knowledge – are ultimately grounded on the shaky footing of constructive comparisons between beliefs and the quest for logical coherency, is a deeply troubling realization. To understand and appreciate the basic methodological fact that knowledge is a consequence of human construction and a fabrication of human mind, the students may need to "challenge and abandon intuitions and opinions they thought were infallible" (Booth 2006: 172). When learners become aware of the fact that, for example, economic policies that have direct effects on their lives are the result of a mix of empirical and theoretical analysis, and that the convenience of one economic policy over the other is established by approximation, they are confronted with the realization of the uncertainty that pervades political action, as well as all other human pursuits. This realization can be troublesome, affecting the way the learners interpret their role in society and define their professional ambitions (Williams 2004: 16).

Liminality and the Pedagogy of Games

Liminal Space

Because they are often implicitly understood by practitioners, threshold concepts often constitute rites of passage. The metaphor of the rite of passage is borrowed from anthropological studies, and indicates the ambiguity and disorientation that one experiences when engaging in rituals that chance one's identity or social status (Thomassen, 2009: 6). The learner who successfully grasps the centrality and pervasiveness of theoretical reasoning in political knowledge, can move from the state of outsider or novice in political studies, to the state of insider and expert of the discipline. The gap that the learner must cross to acquire a sufficient level of familiarity with some aspects of the discipline may take months to traverse, and places the learner in a transitional intellectual state that is referred to as 'liminality' (Meyer and Land, 2005b: 22). The liminal space is the space learners inhabit while they cross the conceptual threshold and acquire new, fundamental, and

transformative knowledge. Broadly, the term also indicates the space of time within which a ritual of passage is performed (Turner, 1969: 15), through which the learner joins the community of practitioners and he or she begin to think like a political scientist.

Learners may find themselves inhabiting the liminal space for a protracted time (Meyer and Land, 2005b: 23). For this study, I wish to focus on two reasons why this may happen. The first reason is the extent to which the threshold concept is troublesome (Savin-Baden, 2005: 163). Theoretical reasoning is in fact challenging to grasp: it requires that learners engage with highly abstract calculations of values, as well as with critical analysis of their own beliefs, such as in the case about discrimination based on sexual orientation presented earlier. But theoretical reasoning is also challenging to accept, as it demystifies scientific knowledge and uncovers its limitations.

The second reason why learners linger in the liminal space is that inhabiting the liminal space involves repeatedly confronting the problem of limited understanding and the difficulty in taking control of the material (Meyer and Land, 2005b: 23). It is often the case that learners experience temporary regressions to earlier status, by reproducing empty knowledge of the threshold concept via mimicry, as the fear that mastering the concept is beyond grasp overtakes them (Meyer and Land, 2005b: 16, 24). The challenge represents a psychological hurdle that tests the learners' self-confidence and endurance, even to the point of affecting their motivation and ambitions. For these two reasons, the liminal space can be a very uncomfortable space to inhabit.

In what follows I explain how games and playful enquiry can help students overcome the first hurdle related to troublesome threshold concepts. In the fourth section, where I conduct reflective analysis on two episodes, I propose that games and playful enquiry can be effective at overcoming also the challenge generated by anxiety and emotional fatigue.

The Pedagogy of Games

The literature exhorts us to consider that play and games provide some of the most sophisticated methods to advance human knowledge, and that this is particularly true of philosophical education and conceptual shifts in understanding (Gadamer, 2004; D'Angour, 2013; Henricks, 2015). My aim is to argue that games and playful enquiry are also an effective way in which we can make the transition through the liminal space less difficult for learners. Recall the reasons why the familiarization with theoretical reasoning is troublesome: (1) the rules of reasoning are often implied and taken for granted in the literature on politics, and (2) the realization that human knowledge is uncertain and constructed requires a deep world view transformation that can be unsettling. The troublesomeness of theoretical reasoning is one cause for discomfort as the student crosses the liminal space. I argue that the literature offers reasons to believe that games and playful enquiry can in fact provide great help in mitigating these two hurdles in familiarizing with theoretical reasoning.

First, games allow learners to uncover the rules of theoretical reasoning by letting them experience how meaning is constructed from a range of facts, from beliefs about those facts, and from values (Kirby and Graham, 2016: 9). Games involve thinking about systems of rules and logic, as well as making causal connections between behaviour and consequences (Tierney et al., 2014). When playing a game, the tacit rules of reasoning are uncovered as they also become the rules of the game itself. Games and playful enquiry are thus a scenario within which learners can put in practice their skills in theoretical reasoning, as they engage in the critical evaluation of their own beliefs, values, and the rules that characterise the 'game' of reasoning. Games make the practice of theoretical reasoning visible and explicit, and learners are given the opportunity to explore, follow, and playfully challenge the rules that underlie theoretical reasoning itself (McLaren 1988: 174).

Second, because of its humorous nature, play allows the learner to safely explore different options, progressing by trial and error, and attempting the creation of the rules themselves (Dormann & Biddle, 2006). Learners can experiment with their own views about the rules of society without risking social repercussions or reprehension from their peers or the teacher. The safe and humorous environment of games reduces the anxiety generated by the realization that our world view might be mistaken. In political studies, games allow learners to experience and contextualize their personal beliefs as part of the hegemonic interpretation of implied political assumptions, such as the idea that political participation is always desirable, or that there is a morally relevant difference between citizens of one country and immigrants from other countries. As they navigate through political issues, learners are encouraged to reconsider the rules of the game – and thus of the social/political 'game', by revealing the interconnection between their own moral commitments, and "the community, culture, and the larger social context: in short, to explore the dialectic of self and society" (McLaren, 1988: 175). Because the experience of play is intense, it involves the whole concentration of the player/learner and demands that he or she detaches from reality and decontextualize the rules of theoretical reasoning (Gadamer 2004: 102-103). But the experience of play is also and at the same time humorous, making the liminal space a less anxious environment to inhabit (LSE Education blog, 2017).

Reflective Analysis

In support of the idea that games and playful enquiry are effective in facilitating the reception of theoretical reasoning in political studies, I present two episodes where I employed a game and a moment of playful enquiry in an undergraduate politics class. In addition, I also aim to uncover the appropriateness of games in overcoming the emotional tiredness and motivational challenge that inhabiting the liminal space generates. This happens, I suggest below, thanks to the fact that play creates intimacy and comradery among students, allowing for a positive environment of comfort and support among a community of peers.

The first episode is a game recreating the rules of the state of nature. Learners were presented with a scenario: "You find yourself in the state of nature. Together with your team-mates, you acquire property through your bodily labour and want to protect it against interference from others. How would you act?". The students were divided in teams, and they were told the rules of the game: they could choose to acquire a non-occupied space, invade someone else's space, or stay still and not acquire any new property. Most students chose to focus on acquiring as much unoccupied areas as possible, stopping when the only option was to invade some other person's property. Student *A* - usually quiet and very polite - chose to go after other people's property and play with an aggressive strategy. Others were less competitive, and by the end of the game students were laughing and teasing each other, whilst also evaluating which strategy brought the most beneficial outcomes. Given the unusual behaviour of student *A*, it became obvious to me that he took the opportunity to experiment a behaviour somewhat alien to him, giving the chance to the others to uncover two fundamental aspects of the theory of social contract: first, that aggression leads to conflict and consequently to the necessity of social rules, and second, that the rules must somehow be determined and affirmed by all if we aim at general compliance.

My role as a tutor was simply to facilitate the game ensuring order in the turn-based activity, and reminding them of the basic rules of the game. Students seemed to forget that I was there, and that the activity was meant to explain one of the justifications of political authority. In the totality and comprehensiveness of the game, students escaped reality and at the same time uncovered, evaluated and experienced the rules of social interaction together with their own moral commitments. This exercise seemed to also uncover the intimate assumptions and automatic response students have about social interaction among themselves. As will become clear after the examination of the second episode, the illusion that the whole world could be enclosed by the walls of the classroom made them more confident in assessing abstract values, such as that of respecting others' property, in a real – albeit playful – situation. At the end of the game, they displayed intimacy and comradery, as well as playful competitive approach to debate and discussion, especially when they were asked to justify their actions in the game.

The second episode, directly following the game, was a conversation in the form of the Socratic Method on the topic of whether we should force people to do things they disagree about in the name of non-discrimination and equality. The Socratic Method involves the tutor guiding the flow of questioning, whilst engaging the student in an interactive and critical search for defensible and logical opinions (Booth 2006, p. 178). Students were asked what they thought about the baker in Colorado, USA, who refused to bake a wedding cake for a homosexual couple. Facilitated by the playful atmosphere generated by the previous game, students quickly understood that the question had no right answer, and that they could go on experimenting and justifying ideas that they did not necessarily believe to be right or appropriate.

As the facilitator of the discussion, I took the role of the "liminal servant" (McLaren 1988: 165) questioning the obvious, classic replies to the problem of discrimination, at times pushing the students to consider controversial statements, other times pointing at the history of discrimination that characterises the USA. With the aim of allowing the students to explore and experiment with different views, I asked them to consider whether their answer to the question would have changed if the case involved a black couple. Some of the students that initially had replied that the baker should be allowed not to bake the cake in the name of freedom of conscience changed their views when confronted with the case of racial discrimination. Because the game had created a safe environment, there was visibly no uncomfortableness in uncovering hidden assumptions, and the class welcomed the change of opinion as an entertaining twist of the 'game' and swiftly moved to discuss how moral and political judgements are affected by hidden assumptions that, when made manifest appear counterintuitive or unreasonable.

The debate at times turned into chatter between the students, which I allowed in part to reinforce the familiarity and comradery among the students. As a result, the students seemed comfortable to speak about race and homosexuality with me or among each other, maintaining an impersonal but earnest level of conversation that allowed them to discuss a difficult topic without having to refer to personal experiences or violate their privacy. This was made possible because the class accepted the exercise as a game, where they could be whomever they wanted for the sake of philosophical enquiry. The conversation uncovered the role of ideology in persons' behaviours, as well as in governmental policies about racial and sexual discrimination. The conversation swiftly moved to and from the analysis of the baker's case and the application of theoretical reasoning in evaluating the weight of beliefs and values in politics. To navigate the method of theoretical reasoning, students asked more clarificatory questions on method than they ever had in the previous workshops. It seemed to me that they were looking at each other more often, and that they looked for me only to gather the tools to continue with their conversation. As they freely exchanged ideas about great political questions, they seemed electrified with the discovery that they were demystifying the taboo associated with issues of racial and sexual discrimination, as well as with the critical views on widely accepted liberal rules of social cooperation. The class did not arrive at any specific conclusion about the case, but the political dilemma of making consistent the liberal commitment to freedom with the commitment to equality was examined to its core.

Conclusion

Theoretical reasoning is a threshold concept in politics that is troublesome because it is often implied and taken for granted by practitioners, and because it involves a deep world view transformation that can be unsettling. Because of its troublesome nature, the intellectual gap that learners must cross to become political thinkers might place them in a

protracted liminal space, within which they may lose motivation and ambition, and risk to being unsuccessful in achieving command of the discipline.

The analysis of the literature on the pedagogy of games suggests that games make the liminal space less problematic to inhabit for learners. First, when playing a game, the rules that practitioners follow to advance knowledge in their field are uncovered as they also become the rules of the game itself (McLaren 1988; Dormann & Biddle, 2006; Gadamer, 2004). Second, the fact that games are playful activities and allow students to experiment with different behaviours without the risk of being judged, makes the liminal space less uncomfortable to inhabit, and allows students to undergo the reconstruction of their subjectivity with more optimism (LSE Education blog, 2017 D'Angour, 2013; Henricks, 2015).

The reflective analysis on two episodes in an undergraduate class corroborates the finding of the literature, and highlights one further element of game and playfulness that makes the rite of passage more pleasant and productive: games are also a gateway for social cohesion and reciprocal trust, increasing the intimacy among students through playful teasing and imagination. In both activities examined, the forms of argument that are considered valid in the case of political justice are exposed, and the learners are encouraged to critically evaluate them and use them liberally within a safe, friendly and intimate environment that encourages reciprocal trust, openness, and approachability.

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What pedagogic teaching styles can be used to improve the attainment levels of black and minority ethnic student nurses?

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Abstract

Nursing students are a fascinating, multicultural set of professional individuals with rich and diverse values. Widening participation, social mobility and increased access to Higher Education (HE) has created a highly diverse student population at the University of Hertfordshire. However, it has recently been recognised that the attainment level of students from Black and Minority Ethnic (BME) backgrounds is significantly different from their White British counterparts. With BME attainment levels at the University of Hertfordshire around 30% lower than White British students, why is this occurring and what can be done to improve these statistics? A literature review will be carried out and data from the University will be collected and analysed to determine the reasons behind this gap, focussing principally on the School of Nursing. Following the critical analysis of the literature, this paper will then discuss the findings and critique what the University is currently doing to address this gap with regards to pedagogy and student support. Technology is advancing rapidly, so therefore, recommendations will be made on how Technology Enhanced Learning (TEL) - specifically Lecture Capture and Flipped Classroom – can be utilised to adapt the current pedagogic styles and benefit our BME students.

Introduction

Nursing is a multicultural profession which thrives on rich and diverse values. The University of Hertfordshire (UH) is privileged to have an ethnically diverse student population. In the discipline of Health and Social Work (HSK), out of a total of 4,440 students, around 23% of the population identify as being from Black and Minority Ethnic (BME) origin (Appendix A). Yet even though the proportion of (BME) students entering higher education is greater than the proportion of BME individuals within the overall UK population, there continues to be a significant attainment gap between White and BME students achieving good degrees (Senior, 2017). For the purposes of this assignment, the term ‘good degree’ will relate to a first-class or upper-second class honours award as described by Richardson (2012).

The nursing profession is intense and stressful, so good teamwork and colleague support is vital to ensure effective working and job satisfaction (Kalisch, 2009). Yet, the attainment gap reveals that BME student nurses are still not receiving the support required right from the start to receive the same level of degrees as their White British counterparts. Evidence of this echoes throughout the University statistics which reveals that the attainment level for BME nursing students is considerably lower at 36%, compared to 67% for White British students (Appendix B, Equality and diversity annual report, 2016). To address this, we must celebrate the diversity of the School of Nursing, and ensure that the academic environment of the University, as well as its general ethos, promotes a welcoming and diverse culture (Hicks, 2007).

Although, for each ethnic group, the attainment gap appears to improve each year, there continues to be a consistent gap averaging at 30% (Appendix C). Recognition of this evidence has initiated a huge response at the University of Hertfordshire, which will be discussed further. There are multiple reasons why this may be the case, not least of all, language barriers and financial circumstances. This assignment will discuss the reasons behind the attainment gap and how to utilise pedagogic teaching styles to improve attainment levels amongst BME students. In these modern times, technology is advancing rapidly. This assignment will discuss the use of Technology Enhanced Learning (TEL), particularly the use of Lecture Capture and Flipped Classroom as ways of transforming traditional teaching methods to benefit BME students (Ozdamli, & Asiksoy, 2016).

Background to the Study

The BME attainment gap in higher education was first recognised in the 1990s, not just nationally, but globally. Reports from the Netherlands and the US also found distinct differences in attainment levels (Moores, Gurkiran and Higson, 2017). However, issues of obesity, diabetes and cardiovascular diseases are being encountered in all ethnic groups and incidences are accelerating worldwide. Therefore, Higher Education (HE) has an obligation to ensure that it is optimising its pedagogy and maximising the potential of its student nurses to provide safe, optimum care.

It has now been internationally recognised that Higher Education is beneficial to individuals as well as the broader society, improving economic success, health and rising living standards (Ou and Reynolds, 2014). Widening participation and social mobility have welcomed an increase in students from a variety of ethnic backgrounds, creating a rich and fruitful diversity.

Nursing in the UK has transformed dramatically over the years from a relatively unskilled career in the mid-19th century to a highly reputable degree profession. The specialist knowledge that is now required to practise safely and competently has broadened significantly as new treatments have been discovered, demanding enhanced understanding and advanced professional decision-making skills (Thomas and Richardson, 2016).

Therefore, UH is intending to increase BME student aspiration and access to higher education, and to improve academic attainment for all our target groups (Transforming Lives UH:).

In 2012, Lord Willis led an independent enquiry followed by recommendations into providing excellent pre-registration nursing education and how to ensure that nurses were educated to deliver excellent standards of evidence-based clinical care through critical thinking and decision making. The commission analysed the pre-registration education of nurses, with the aim to create and maintain a workforce of competent, compassionate nurses fit to deliver high-quality care (Peate, 2013). However, until the ethnic imbalances, are appropriately addressed, excellent standards of education and clinical care cannot be achieved.

It must be acknowledged however, that nursing is not simply an academic job, and the graduates with the highest grades do not necessarily make the best nurses. The whole essence of the nursing vocation is being kind, caring and compassionate. Without these vital skills, empathetic, patient centred care cannot be delivered. It is therefore imperative that student nurses learn, not only academic skills but also, compassion, the main reason why many students apply to do nursing in the first place.

Examining possible contributory factors to the achievement gap

There are a multitude of reasons why BME students are not achieving as well as White British students. However, while previous research has investigated several factors contributing to the poorer attainment of BME students at University level, none have been able to fully account for this gap (Moores, Gurkiran and Higson, 2017).

Financial Constraints

One argument is the financial constraints of Higher Education. It is well acknowledged that Black students work longer hours in paid, part time employment than any other ethnic minority (Connor *et al.,* 2003). Black students are more likely to come from a lower socio-economic background, with 75 per cent of Britain's Black communities living in Britain's poorest communities (NUS, 2011). Andrews and Wilding (2004), suggest that financial concerns have the biggest impact on academic performance. Although EU legislation instructs that international students can work only up to ten hours per week in term time (Kelly, 2010), there is no such regulation for home students, so the impact of long working hours on student performance is likely to be much greater for home students (Maxwell-Magnus and Barefoot, 2013). This is potentially a significant reason for Black home students not achieving the same grades as their peers.

Financial worries and constraints were identified by the National Union of Students (2011) as a significant issue for Black students who are more likely to come from low socio-

economic backgrounds and are therefore unable to ask parents for financial support. Students were interviewed and below are some of the answers that were given with regards to financial hardships:

"Most of my White friends do have a student loan but their parents will 'top up' their money if they need it. I wouldn't ask my parents to do so because I know it'd be a real burden for them."

"We have to fund ourselves as our parents are not in the financial position to support us through education and this has a knock-on effect on my studies. Most of my minority peers have to work longer hours to pay for tuition rather than work longer hours to get high grades" (NUS, 2011)

This results in many Black students being forced to work part time on top of their studies, something seen regularly in the nursing programme as well as nationally, with up to 60% of student nurses taking on part time work (Hasson, McKenna and Keeney, 2013). The student nurse bursary was initially introduced in the late 1980s, allowing student nurses to become supernumerary, supported with bursaries to enable them to follow the full time higher education nursing degree (Nazarko, 2016). Unfortunately, the UK is currently undergoing a radical reform in Nurse education following the decision this year to abolish the student nurse bursary. It will be replaced with the introduction of a tuition fee and student loan system in line with other professional degree programmes. The difference between the Nursing programme and other disciplines however, is that nursing is a full-time curriculum, with minimal allowance for extra paid work. This has the potential to further alienate BME nursing students, who, already amongst the poorer students, will not be able to afford to come to university. It is therefore imperative we support these students as much as possible to avoid losing that fruitful diversity.

Commuting

Research reveals that black home students are more likely to commute from home than white students who predominantly live on campus. The Higher Education Funding Council for England on Student Ethnicity, revealed that 61% of white home students lived on campus as opposed to 41% of black home students. (Gittoes, 2010). Although this percentage relates to all students, it is assumed that the Nursing degree correlates. Living at home can result in some nursing students commuting for up to an hour each way, which means less time available to study or take part in extra-curricular activities. It can also mean less time available for academic support from module lecturers, due to time constraints.

Language barriers

Nursing over the years has progressed significantly alongside medical advances, becoming increasingly sophisticated to meet the needs of patients who live longer and survive more diseases and medical crises, often with a complex interplay of long-term conditions (Thomas & Richardson, 2016). The application of advanced medical terminology is now more crucial

than ever. For many overseas students, English is not their first language, with the added disadvantage that many will not have written an assignment. In addition to this, Black home students traditionally enter University with poorer educational qualifications and academic history to begin with, an argument supported by the Higher Education Funding Council for England report (Gittoes, 2010). These educational difficulties endured by Black students prior to commencing their university degrees are considered significant contributions to under-achievement at University (Connor et al, 2003).

Exclusion and Isolation

A further suggestion for the attainment gap is that, as a minority, BME students are more likely to feel isolated and socially excluded, with up to 23 per cent of BME students feeling they were not integrated in university social life (National Union of Students, 2011). BME students have reported being treated less favourably than White British students, with students expressing feelings of being unsupported both academically and emotionally (NHS Workforce Race Equality Standard, 2015). Black students were interviewed regarding this subject and their answers were surprising

"I feel like I am the odd one out and that I don't have anything in common with anyone around me"

"Sometimes it's quite hard to fit in when no one wants to work with you, e.g. during a practical session."

"Sometimes it makes me feel I don't belong anywhere, and that people on my course dislike me due to my ethnicity."

(NUS, 2011)

It could be argued that there is still a traditional image of Higher Education being only accessible to white middle-class backgrounds, which, if this is the case, needs immediate focus. Particularly in the case of nursing, which deals with a plethora of different staff and patient cultures and values every day, these diversities should be celebrated. Interestingly, a study carried out by Moores, Birdi & Higson, (2017), set out to analyse the performance levels at a University in Birmingham where Black students were the majority. It was discovered that even at a highly multi-cultural university, White students who were in the minority, still consistently out-performed their Asian and Black counterparts in terms of final year marks (Moores, Birdi & Higson, 2017).

Unfortunately, it is not simply the nursing students' experiences at Universities which can affect their learning, but also what they encounter while on placement. There are disturbingly numerous reports of racism in nursing practice, with up to 58% of BME NHS workers experiencing racial abuse and harassment (Lemos and Crane, 2000). Although this is outside of the University environment, it remains an important part of the students' education.

Recommendations

Hicks (2007) reasons, that to bring about change, it is necessary to develop the skills, attitudes and values to enable people to collaborate towards that change. A global dimension must permeate the current, modern, world-class curriculum, to encourage critically thinking students to understand global issues and events from different perspectives and recognise that they can be effective contributors in working on challenges, solutions and opportunities.

The University of Hertfordshire has set out a Strategic plan, with key, progressive, strategic objectives such as 'Strengthening the global perspective in the curriculum', and 'Strengthening the diversity of our community'. The aim is to achieve these objectives by 2020 through focusing on the development of students' social and global awareness and ensuring a culture of mutual respect. The previous interviews documented in this paper by the National Union of Students (NUS, 2011) reveal that this is not yet happening. However, just small changes can help create equal treatment. The NUS (2011), recommends focusing on what can be achieved, and how to achieve it, as opposed to concentrating on the barriers.

Lecture Capture

The first contributory factor highlighted was regarding the financial constraints of BME nursing students. Unfortunately, with the removal of the bursary, student nurses will be forced into working part time to support their already full-time degrees.

One recommendation for the financial difficulties faced by BME students would be the utilisation of the pedagogic approach of lecture capture in nurse education. Lecture capture is a term used to describe recordings made from a live lecture to a group of students on a specific course (McGunn and Newton, 2015). These recordings can be then provided digitally, and often combined with other pedagogic tools such as lecture slides, to enhance education. With rapid advances in technology, producing and accessing lecture recordings is now becoming increasingly straightforward. Lecture capture is unsurprisingly becoming increasingly popular among Higher Education students (McGunn and Newton, 2015). With technology encompassing more and more aspects of modern day life, for example, smart phones, on-line submissions, and students becoming more computer savvy, it seems logical to apply this digital pedagogy to lectures.

This opportunity would mean that students who need to work part time to support themselves, or have child-care complications, would still be able to still access the material at a time that suited them, and work at the same time.

Lecture capture could also assist nursing students who commute, meaning that they could watch some lectures online, rather than travelling for hours. This would be particularly

useful for the shorter lectures, where the student would only need to be on Campus for a couple of hours. As well as the benefits of being able to observe the lecture with better concentration, without being tired from a long commute, it would also be financially beneficial as it would less money would need to be spent on petrol or public transport.

Lecture capture is becoming progressively more popular as both a substitute and a supplement to face-to-face classroom time (McCunn and Newton, 2015). Although initially, the author's personal feeling was that this would deter students from attending lectures, the literature disputes this and in fact counteracts the argument, finding that students who replayed the lectures repeatedly, were significantly more engaged and were found to have improved grades (Chester et al., 2011). This is because, repeated playing meant students could pick up information they may otherwise have missed, revisit complicated material and work through it at their own pace, catch up on a missed lecture and Exam revision (Chester et al., 2011).

Unfortunately, multiple drawbacks have been encountered with lecture capture in relation to student learning approach, the difficulty of the topic and students' levels of experience with modern technology (McCunn and Newton, 2015). If students failed to understand an aspect of the lecture but were not present in person, they would be unable to ask a question at the time and therefore risk misunderstanding the information. Additionally, students who used Lecture capture alone, as a substitute to lectures, are unlikely to achieve as well as deeper learners who used them in conjunction.

The University of Hertfordshire does not yet use Lecture Capture routinely in all disciplines, however, if appropriately managed, it could highly benefit Higher Education students. It must be advocated as a supplement to learning rather than a replacement to the traditional classroom lecture, with clear guidelines on how to access it, to ensure all students can benefit from it.

Flipped Classroom

With increasingly complex medical terminology, providing the learning material beforehand would potentially benefit students for whom English is not their first language.

The flipped classroom is a relatively new approach described by Eaton (2017) as quite literally flipping the learning around so that the student is provided with the materials prior to the lecture, in order for them to learn the subject first. The physical lecture can then be used to build and reflect on this learning. The rationale is to increase the quality of the time spent in the lectures, with students already having a base-line knowledge. Using the classroom lecture in isolation has come under recent criticism as an ineffective means to help students acquire the necessary knowledge and skills (Gilboy, Heinerichs, & Pazzaglia, 2015). A case study by Ferguson et al (2017) reported a higher level of student engagement with the activity, improved student experience and enhanced satisfaction with the subject.

Flipped Classroom can also be used as a way of assisting students who feel isolated to be more involved in the lectures because they would have time to prepare for the topic. Flipped classroom learning is rapidly becoming popular in pre-registration nursing as a way of facilitating autonomous and self-directed learning (Schlairet et al, 2014).

Flipped classroom goes hand in hand with Piaget's constructivist theory. Piaget believed that students adopt knowledge through a process of accommodation and assimilation. New student knowledge is constructed and built up like building blocks, trying to interpret the new information and link it to what they already know (Erickson 2012). A stage model was developed by Elder and Paul (2010) which suggests students pass through six stages of development in critical thinking. These stages include; Stage One: The Unreflective Thinker, Stage Two: The Challenged Thinker, Stage Three: The Beginning Thinker, Stage Four: The Practicing Thinker, Stage Five: The Advanced Thinker, and Stage Six: The Accomplished Thinker (Elder and Paul 2010, Cited in West 2016). Taking control of one's learning can encourage a student to move from a beginning thinker to a more critical, practicing thinker, an essential skill in clinical nursing practice.

The School of Health and Social Work does routinely use Flipped Classroom, but it must be ensured that the information provided prior to the lecture is clear and can be understood by all individuals, regardless of ethnicity.

University Top Tips

As part of the University of Hertfordshire's strategic plan, a set of recommendations have been developed to support students to become successful in their studies (See Appendix E). Among them are recommendations for the lecturer to manage student groups, encouraging students out of their friendship groups to promote cross-cultural learning. As a lecturer it is regularly noticed in the classroom that ethnic groups opt to sit together. During group work, however, the groups separately come up with great ideas, while missing other points. When the groups are randomly divided up, it enables diversity in the classroom and the ability to share their ideas and experiences. This technique is regularly used and has proven to be highly successful. Not only does it encourage interaction and the sharing of ideas and experiences, it discourages isolation and social exclusion.

For additional financial assistance, the University of Hertfordshire has put in place the hardship fund to help provide financial assistance to students struggling to fund their education. This service currently applies to any Home students who require extra financial help.

The University of Kingston has recently carried out a lot of work to improve their BME attainment gap, through recognising the inherent value of cultural diversity. The University has enhanced its curriculum to incorporate the core values of diversity and inclusion and has won awards for its inclusivity and accessibility of its courses. It was also commended on its

ground-breaking work reducing the attainment gap between BME and White students. The University of Hertfordshire is aiming to mirror this success by running equality and unconscious bias seminars for staff, as well as academic and multicultural diversity training for students (Kingston University, 2017).

Finally, acknowledging that BME students will potentially need further support should be initiated by the lecturer as early as possible, through setting aside tutorial support time and promoting the University's Academic Skills resource. This is a website designed to assist students with academic writing, with staff employed to offer academic support and has been invaluable to the students using it.

Conclusion

Every single student comes to University with a wealth of past experiences, whether that's caring for a family member, leaving their home country, or joining the University as a mature student, every individual must be listened to and celebrated. Recognising this gap in achievement levels among student nurses has instigated an immediate desire to try to do whatever is possible to overcome it. The future of the nursing workforce depends on the University's dedication to support its students to achieve the greatest attainment possible. This literature review has created an awareness of one's behaviour in each lecture, considering the suitability of the lecture content and identifying that this is a much greater issue than first assumed. With technology advancing rapidly, it makes sense to ensure pedagogic styles develop alongside it. Additionally, making small changes to classroom teaching, student support and increasing awareness to all individuals through training sessions and promotions can only have a positive response. It would be interesting to re-evaluate attainment levels after the recommendations have been applied.

Appendix A

University of Hertfordshire UH 25

Ethnicity	COM	CTA	EDU	ENT	HBS	HSK	HUM	LAW	LMS	PAM
White	490	1760	1970	650	1630	2970	800	420	1670	260
Asian/Asian British	390	210	150	450	1110	410	240	590	960	100
Black/Black British	190	220	90	200	940	1040	200	470	580	30
Chinese	20	80	40	70	430	20	140	130	40	10

Numbers of students by ethnic profile in Schools 2014/15

HSK – School of Health and Social Work

Appendix B

Attainment gaps – 2015-16 data. University of Hertfordshire

School	Ethnicity Split	% of Good Degrees	Attainment gap
HSK	BME	36%	
	White	67%	31%
HUM	BME	62%	
	White	83%	21%
LAW	BME	67%	
	White	68%	1%
LMS	BME	59%	
	White	74%	15%
PAM	BME	67%	
	White	80%	13%
UH	BME	55%	
	White	76%	21%
	Overall	65%	

Appendix C

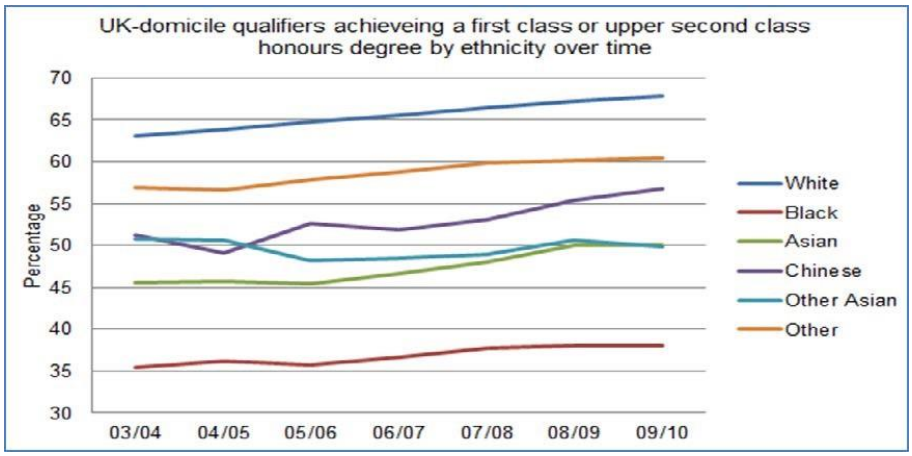


Figure 1. *Performance of UK domiciled students according to ethnicity, over time (adapted from Blandford et al., 2011).*

Appendix D

Top tips to support BME student success

For more ideas and information please see the Learning and Teaching Institute's resources in the Curriculum Design

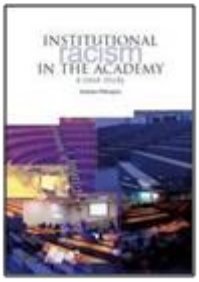
Toolkit on Inclusive Teaching and within the BME Success Project resources

1. Learn student names, it makes a huge difference (studynet class lists now enable you to download student pictures)

2. Invite participation, from all students, verbally and through your body language

3. Manage student groups to move students beyond friendship groups to benefit from cross cultural learning

4. Facilitate discussions with students regarding how working with people of diverse backgrounds enrich their own learning



5. Assess your own racial or cultural biases; develop an understanding of how your experience, values, beliefs and stereotypes inform the way you interact with individuals whose racial background differs from your own

6. Review and develop your teaching materials (e.g. reference lists and case studies) to include BME authors and BME case studies

7. Consider opportunities for students to be inspired by BME role models (e.g. guest lecturers, video clips or interviews)

8. Model appropriate language and behaviour and be confident to address any racist and discriminatory behaviours

9. Whenever possible, use anonymous marking

10. Use informal and formal feedback mechanisms that capture feedback from all students

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New challenges in dietetic practice placement training and how can peer assisted learning and simulation assist with the challenges.

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Abstract

Based on the findings of a recent report regarding the future of the dietetic profession in the UK, it was noted that new and innovative ways of delivering dietetic placement training should be considered to prepare and equip better the future dietitians. In the University of Hertfordshire, we are planning to utilise two new approaches in dietetic student placement training, peer-assisted learning (PAL) and simulation.

PAL can be defined as a 'student to student' support method which can facilitate active discussion and cooperative learning with the potential to improve learning outcomes while simulation can be defined as an artificial representation of an operation or situation that can be used to accomplish certain learning goals.

We decided to conduct research to explore the impact of implementing the proposed changes by utilising an online polling platform (Mentimeter) and involve our current second year dietetic students in the decision making. Twenty-two out of twenty-five student completed the online polling questionnaire. The majority of the students reported the use of computer-based simulation would help them during their training and in their practice as qualified dietitians, with more than half feeling confident using technology although they would need additional training. Furthermore, the idea of peer-assisted learning during dietetic placements in a clinical setting and undergoing OSCE's (Objectively Structured Clinical Examination) while in university grounds was appealing to more than half the students that participated in the polling, as they felt would help them enhance their clinical knowledge and practice.

Based on this finding, we are considering moving forward with our plans to in cooperate peer assisted learning and simulation into our dietetic practice placement training.

Introduction

What is the current situation in dietetic training

Practice dietetic placement has an extremely important role in dietetic education and training as it consolidates the theoretical knowledge student acquired at University with practical experience in a clinical set up. In recent years thought the flagship campaign by the Association of UK Dietitians called 'Trust a Dietitian' it was noticed that the traditional role of the dietitian being mainly employed in an NHS setting is changing. The future dietitian may have to work across different sectors and settings (DiMaria-Ghalili et al. 2013). Dietitians are now more likely to be recruited in a variety of field related to nutrition such as eating for health, food manufacturing, social care, community education, sports and enhancement nutrition and academic research to mention a few. Also, dietitians have a pivotal role in public health. Along with registered nutritionist's they have an important role in providing their knowledge, advice and guidance both at a personal and population level to assist people across the UK improve their health and their lives (Freeland-Graves and Nitzke 2013).

Furthermore, the Association of the UK Dietitians believes that there will be growing challenges over recent years in securing dietetic practice placement to match the increasing needs due to demand (Brun, 1985). For all the reason mention above it is important for the dietetic profession to improve and uphold their skills and expertise.

Universities that are involved in educating and training future dietitians need to find new and innovative ways to support their students and provide them with the practical tools, the knowledge and the skills to be able to work in different settings, ranging from the traditional NHS departments to the new emerging working environments (Gartman, 2017). The way the dietetic practice placements are currently set up are focused on the traditional role of the dietitian being mainly employed on the NHS, with the student dietitian being supervised and shadowed at any given time by a dietitian. This model of placement delivery is neither cost-effective nor broad enough to cover the new challenges and job prospects the future dietitians will likely to face. (Hark and Deen, 2017)

The British Dietetic Association (BDA), recognises the important and vital role that clinical practice placements have in order to create the new generation of dietitians, while understanding that placement structure should be more flexible and to include a variety of new and innovative ways of teaching and engaging with dietetic students. The dietetic practice placements in the UK still need to satisfy the minimum amount for clinical exposure, which is 300 hours, that would allow the student to demonstrate consistent clinical skills and caseload management as required by the Health Care Professional Council (HCPC) (HCPC, 2013; Holli,Calabrese and Maillet, 2013). In addition, the sites of practice placements need to accommodate the variety of the emerging new working environments

that the entry level dietitian could work in, which include academia, the food and nutrition industry, public health, charitable organisations and in research to mention a few. Based on the current findings regarding the limitations of the existing dietetic practice placements offered and the future job prospects of dietitians, universities that are involved in student dietitians training need to examine alternative techniques or models to deliver practical experiences to the dietetic students. Considering the different ways a dietetic practice placement could be supported and delivered, there are two main approaches, based on evidence from how other health care professional receive their practice training. Those approaches are peer-assisted learning and simulation.

Peer-assisted learning and Simulation – Background information

Peer-assisting learning (PAL) is defined as a 'student to student' support method with the aim to facilitate active discussion and cooperative learning. The way PAL can be set up especially for healthcare related programs like nutrition and dietetics can be described either as horizontal or vertical peer support. In the horizontal peer support approach, students from the same academic year provide support to each other, while in the vertical approach students from the year above provide support to the students from the year below. The approached used in dietetic courses is an adjusted version of the vertical approached, called cross-level peer tutoring (CLPT) based on teaching theories from Vygotsky on proximal development and on constructivism theory. Based on these theories learners could achieve a better understating and acquire an enhance knowledge as they collaborate with senior students, who act as PAL tutors, and also with academic/ clinical members of staff that have a higher level of competences in dietetics (Tudge et al, 1999). The academic/ clinical members of staff in CLPT can act as a guide for the student if the need arises, but without creating a passive learning environment (Green, P, 2011). In a recent study by Reidlinger et al. (2016), they identified that peer assisted learning had improved both the capacity of NHS dietetic practice placement providers by a 1.3-fold increase, and more importantly dietetic students reported much better learning experiences and workload when compared with a traditional one: one dietetic placement. Peer assisting learning can enable you to gain a better and deeper underrating on the subject matter and help you become more mindful and improve your communication skills (Glynn et al,2006).

Simulation can be defined as an artificial representation of an operation or situation that can be used to accomplish certain learning goals and has been used in medical and nursing training for many years (Al-Elg,2014). In dietetics there are two main ways simulation is utilised. One is by using a computer platform to provide a virtual scenario that students have to complete and depending on the decisions they made, different outcomes would be produced which can then be used for self-reflection and to facilitate further discussions with the course tutor and other dietetic students. This approach has the potential to be utilised both for clinical and non-clinical scenarios to cover a variety of different job roles the

dietitian could be employed to fill. The other way simulation can be utilised in dietetic training is by using objective structure clinical examination (OSCE), where you create a certain clinical scenario and you utilise volunteers to act as patients. Although this approach is mainly limited for a clinical environment, it has the advantage that the dietetic student has to utilise both his clinical and communication skills and is the closest to a real life case, under an educational safe environment. In recent years simulation and technology models have been found to be utilised and incorporated into dietetic placements programmes, where some of the models simulating the learning resources while other utilizing technology in education, to assist with better student experience and learning (Helm, 2007).

In a study conducted by Palermo et at. (2009), regarding which was the preferable learning style among student dietitians, it was noted that the majority were classed as convergers based on Kolb theory. Convergers learn better if they engage with more practical tasks and can be very good at finding practical solutions for the problems they face (Kolb,1976). Based on this information, we can feel more confident that peer assisted learning and simulation either in the form of OSCE or computer simulation would benefit and assist our dietetic students to develop their dietetic skills in a variety of work related areas and be more competitive in the job market.

The aim of this study was to explore the opinion of a cohort of second-year dietetic students regarding using peer assisted learning and simulation during their dietetic course and mainly in dietetic practice placement. Secondly, to research the education and teaching theories of peer-assisting learning and simulation and how they can be successfully applied in the dietetic practice placement and dietetic student training.

Material and methods

Current second year dietetic students in the University of Hertfordshire were approached to participate in an online polling questionnaire. Ninety per cent of the second-year dietetic student (22 out of 25) in the academic year 2017-2018 completed the on-line polling questionnaire using the Mentimeter platform. Mentimeter was chosen to develop the online polling questionnaire as participants can be completely anonymous, no ethical approval was required, and students could choose not to participate even if they were physically present in class. The Mentimeter application can only provide the total number of participants, with no identifiers or indicators on who specifically participated. From the twenty-two students that participated, 16 were female and 6 male.

Students were informed of the online polling questionnaire at the end of one of my lectures. The purpose and the aim of the study were explained to the students. Students were given the option to decide when would be the most appropriate time to undertake the on-line polling questionnaire. It was agreed that the most appropriate time was at the end of a lecture. To avoid students feeling compelled to participate in the study, a lecture session

that I was not delivering was chosen. The online polling questionnaire would last approximately 3-5 minutes.

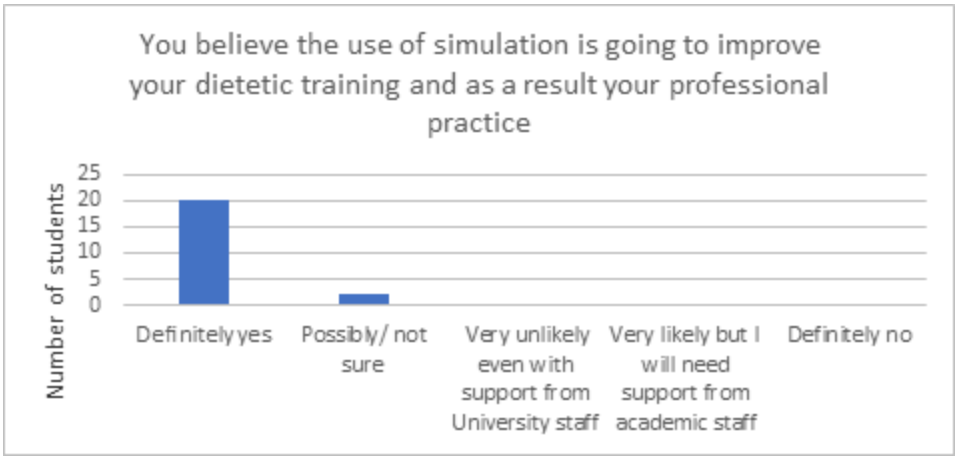
The students had to answer 5 questions and each question had 5 different choices. Students could choose only one option. Details about the questions and the available choices can be found in the Appendix-1. The approach utilised in this polling questionnaire was to collect qualitative data on dietetic student preferences regarding peer assisted learning and simulation during their teaching and training time both in university and in their professional/clinical placement.

Results

Twenty two out of the twenty-five second year dietetic students at the University of Hertfordshire completed an online polling questionnaire regarding the use of peer assisted learning and simulation in dietetic practice placements. The responses of the students to the individual questions are shown in figures 1 to 5.

For the majority of the students (20) when asked the question 'You believe the use of simulation is going to improve your dietetic training and as a result your professional practice', they responded that they would definitely benefit, while 2 responded that they were not very sure (Fig.1).

Figure 1: Answers from twenty-two second year dietetic students on the question "You believe the use of simulation is going to improve your dietetic training and as a result your professional practice".

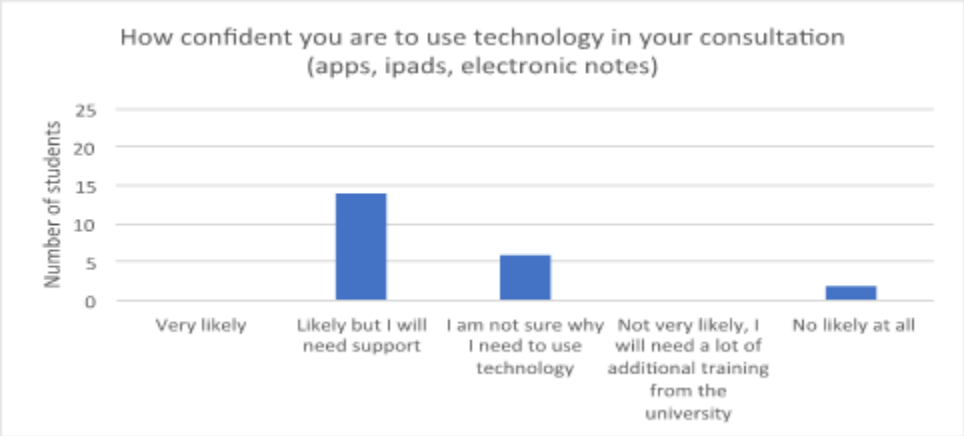


20 students responded that they would definitely benefit, while 2 responded that they were not very sure.

More than half of the students (14) when asked 'How confident you are to use technology in your consultation (apps, ipads, electronic notes)', responded that they felt confident to use technology in to their consultation but they would require additional support from the

academic staff. Furthermore, nearly a quarter of the students (6) were not very clear/ they were not very sure why they need to use technology and 2 students reported that it was not likely at all they would use technology in their consultation (Fig. 2).

Figure 2: Answers from twenty-two second year dietetic students on the question "How confident you are to use technology in your consultation".



14 students felt confident to use technology in to their consultation but that they would require additional support from the academic staff. 6 students were not sure why they would need to use technology and 2 students reported that it was not likely at all they would use technology in their consultation

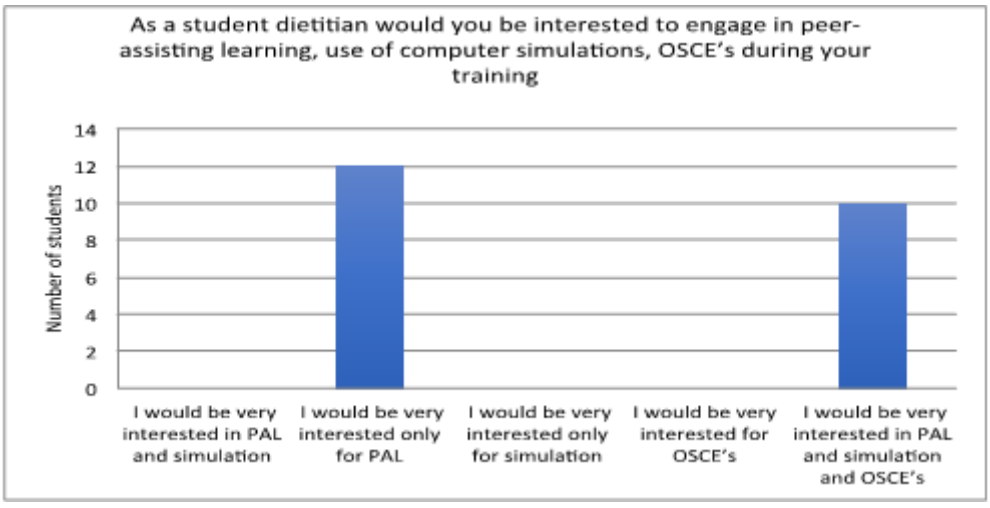
To the question 'Which of the following apps when advising an individual as a dietitian can improve the most your consultations?', 10 students chose the use of application for nutritional values and portion pictures, 10 students chose the use of behaviour changing techniques focusing on encouraging individuals, and 2 students chose application to assist with calculating BMI, energy and protein requirements (Fig.3).

Figure 3: Answers from twenty two second year dietetic students on the question "Which of the following apps when advising an individual as a dietitian can improve the most your consultations".

10 students chosen the use of application for nutritional values and portion pictures, 10 students chose the use of behaviour changing techniques focusing on encouraging individuals, and 2 students chose application to assist with calculating BMI, energy and protein requirements.

Furthermore, little more than half the students that took part in the polling (12) were keen to engage with peer assisted learning when asked the question: 'As a student dietitian would you be interested to engage in peer-assisting learning, use of computer simulations, OSCE's during your training.' while 10 students would prefer all teaching methods as part of the curriculum (Fig. 4).

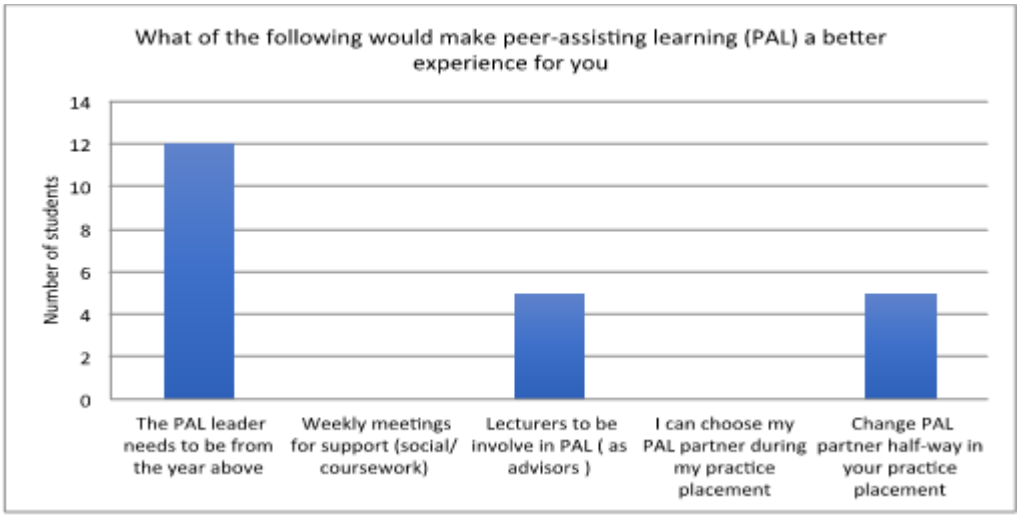
Figure 4: Answers from twenty two second year dietetic students on the question "As a student dietitian would you be interested to engage in peer-assisting learning, use of computer simulations, OSCE's during your training".



12 students were keen to engage with peer assisted learning. The remaining 10 students would prefer all teaching methods as part of the curriculum.

Finally, to the question 'What of the following would make peer-assisting learning (PAL) a better experience for you?' 12 students answered that they would prefer to have vertical PAL setting, meaning second year students would be paired with third year students who would act as PAL tutor, 5 students wanted lecturers to act as advisors/mediators during PAL, and 5 wanted to be able to change PAL partner halfway through your practice placement (Fig. 5).

Figure 5: Answers from twenty two second year dietetic students on the question "What of the following would make peer-assisting learning (PAL) a better experience for you".



12 students would prefer to have vertical PAL setting, 5 students wanted lecturers to act as advisors/mediators during PAL, and 5 students wanted to be able to change PAL partner half way your practice placement.

Based on the answers from the twenty-two second year dietetic students, the following issues were identified.

- 90 % of the students who answered the online polling questionnaire felt that the use of computer-based simulation would help them during their training and in their practice as qualified dietitians.
- 65% of the students who answered the online polling felt confident using technology like mobile apps and behaviour change tools but they would require support and training from the academic staff.
- 60% of the students were keen to do peer-assisted learning as long as it was in a vertical set up, meaning that a third-year dietetic student would be paired with a second year student during practice placement.
- Almost 50% of the students felt that OSCE's were a helpful way to enhance their clinical knowledge and practice. After the end of the polling questionnaire, a few students that were likely to belong to this 50% reported that their stress and anxiety levels increased

especially the day before the OSCE's, but they found it very useful as an activity to improve their clinical practice.

Discussion

The British Dietetic Association (BDA) is the regulating body responsible for establishing the benchmark of the level of education and training student dietitians should receive. Their position is that dietetic practice placements are a crucial component for the development and success as a dietitian.

The Nutrition and Dietetics department in Hertfordshire University has recently restructured the way dietetic practice placements are organised to allow for more flexibility in the placement provisions to reflect the diversity as well as the breadth of the entry-level dietitian working environment. Of course, the practice placements still need to incorporate a clinical element of at least 300 hours to ensure that the students can use caseload management and show clinical performance consistency, but an improvement on the way is delivered are always welcomed (Holli, Calabrese and Maillet, 2013).

We wanted to include our dietetic student at the University of Hertfordshire, in the decision to possibly incorporate two alternative models to deliver dietetic practice placements, before we make any further plans. The two alternative models of delivering dietetic practice placements were peer assisted learning and simulation.

Peer assisted learning and the educational theories behind it

The current model used for dietetic practice placement education is to allocate between one and three students to a single supervisor with the most common set up being, to have two students under one supervising dietitian. During a discussion in class after the polling results and based of their previous experiences, 60% of the student dietitian that completed my polling questionnaire believe that peer assisting learning (PAL) in the form of cross-level peer tutoring (CLPT) would benefit them during their dietetic practice placement. The model of cross-level peer tutoring has experienced growing proof of the efficiency of the placement dietetics education. In Australia, an innovative model designed for the placement education and learning for the individual case management element placed together two learners under the supervision of one supervisor (Brun, 1985). This set up promotes and accommodates peer observation and feedback as well group discussion between supervisor and peer partners.

Some of the benefits and disadvantages of PAL in the form of CLPT are discussed below. As an overall, the main benefits of CLPT are the development of team working spirit, an increase in confidence, an improvement on dietetic performance and economical benefits for the university, as more students can be on dietetic practice placement at the same time. (Werner et al. 2017)

In more detail, CLPT can be very beneficial both for the student that acts as a tutor and for the tutee. As a student tutor you tend to spend additional time to prepare and plan the material you are going to teach your tutee, which would act as a revision for the student tutors, following cognitive constructivism theory. In a recent study involving CLPT during nursing practical skills sessions in Oslo University College, it was reported from the first-year nursing students (tutees) that their practical clinical skills were enhanced while the third-year students (tutors), reported feeling more competent in their supervising skills (Bjørk et al. 2011). Following on that, acting as a teacher from the early stages of your dietetic training it is good practice to as it engrains to you an important component of your role as a dietitian, the role of practice educator. As your career progresses to a more senior dietetic role you will be required to act as a practice educator for the junior dietitians.

In addition, acting as a student tutor can boost your confidence and improve your leadership skills while for the tutee it helps with their development, as they see the tutor as someone who was recently been in their position and can relate to the problems they face in their learning. Also, the tutor – tutee can engage in deeper learning, in a more 'friendly' environment by facilitating mutual problem solving and brainstorming.

A drawback for using PAL-CLTP, is the possibility of less academic staff/ senior dietitian – student contact time with the possibility of student tutors not challenging their tutee's enough as they are not as competent and have less experience than a senior member of staff.

Similar benefit / drawback of utilising PAL-CLTP during dietetic placements were identified also when medical students had in-ward training with PAL. In a recent study by Krautter et al., undergraduate medical students at the Medical University Hospital of Heidelberg had to spend 5 weeks in-ward training either with or without final-year students as peer tutors (Krautter et al, 2014). The undergraduate students that had final-year medical students as tutors felt more supported, motivated and more able to engage with informal learning which resulted in feeling less anxious working in a hospital ward and more likely to become more confident as practitioners. A drawback, which came as a surprise to the authors, was the fact that undergraduate students with tutors felt possibly over-confident in comparison with the group without tutors, and less than half (48%), had contact with the physician in charge of the ward. This can be seen as a worrying issue in PAL-CLTP, as students tutors cannot completely substitute the experienced and high level component healthcare professionals during practical training (Krautter et al, 2014).

The benefits associated with PAL are not merely to achieve better marks and improve learning outcomes and skills. Based on the results from our polling questionnaire 50% of the dietetic students felt stressed before their OSCE's. Through PAL students can develop not only an educational but also a social and psychological support system to help them to cope better when feeling stressed and overwhelmed from University life (Green, P 2011).

Simulation and the educational theories behind it

Simulation in dietetics can be defined as an artificial representation of a real life situation either on a computer or using OSCE in class, with the aim to amplify the dietetic training by replicating certain aspects from the real world in the safety of a controlled environment (Gaba 2004).

The educational theory behind simulation is experiential learning. Experiential learning theory was developed by Kolb in 1984, and consist of four stages of learning; abstract conceptualization, reflective observation, active experimentation and concrete experimentation. More than one stage can happen simultaneously, stages can by bypassed and they are linked in a non-linear manner, meaning different individuals can have a different initial stage (Kaufman and Mann, 2010).

The benefits of simulation especially in dietetic practice include future service users being safer as the dietetic practitioner was trained in similar situations under realistic conditions in a controlled environment. Also, the student dietitian will feel more confident when practicing as they have already experienced similar situations, under realistic conditions but in a controlled and safe environment. Another benefit of using simulation in dietetic training is the ability to be trained in not so common conditions/ situation that may not arise during their training as dietitian in the current training scheme. Similar benefits of simulation in clinical practice were identified during the training of medical doctors in longitudinal continuity of care. The medical student had to use a laptop with an electronic patient record system and simulate 4 consecutive consultation with a specific client having a variety of medical issues. The majority of medical students reported that the simulation experience increased their confidence in management of chronic conditions, helped them improve their skills on building rapport with patient and felt more confident using a laptop with an electronic patient record (Vest et al. 2016).

A drawback for training using simulation can be that students can become over-confident of their skills and practice, which may result in taking greater risks and decisions when faced in an unfamiliar situation. From the university's perspective, simulation, and specifically OSCE, can be costly and labour intense, as it requires a higher number of members of staff and special facilities and resources than teaching in a lecture theatre (Kaufman and Mann, 2010).

Based on the results from our polling questionnaire the majority of the students that took part (90%) felt that computer simulation will benefit them, with 50% of them also appreciating that OSCE's will help improve their dietetic practice. These results indicate that the dietetic students that participated in the study could recognize the benefit of simulation in their dietetic training.

Conclusion

The dietetic placement training receives great interest from the entire dietetic profession as it plays a major part in shaping the future dietetic practitioners. Based on a report regarding the future of the dietetic profession it is widely recognised that dietitians in the future will be working across different sectors and settings including clinical/hospital nutrition, food manufacturing, social care, community education and sports nutrition to name a few. Based on the results we received from our poll, we are now more confident that our students will appreciate, and they will benefit if we decide to introduce PAL and simulation into the dietetic placement training. Of course, this was only a small cohort of students and an additional polling questionnaire may take place next academic year with additional questions that were identified after discussions with the current student cohort, before we make the final decision to in-cooperate PAL and simulation into our dietetic practice placement training.

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Appendix- 1

Q.1	Possible options (can chose one)	
You believe the use of simulation is going to improve your dietetic training and as a result your professional practice	1	Definitely yes
	2	Possibly/ not sure
	3	Very unlikely even with support from University staff
	4	Very likely but I will need support from academic staff
	5	Definitely no

Q.2	Possible options (can chose one)	
How confident you are to use technology in your consultation (apps, ipads, electronic notes)	1	Very likely
	2	Likely but I will need support
	3	I am not sure why I need to use technology
	4	Not very likely, I will need a lot of additional training from the university
	5	No likely at all

Q.3	Possible options (can chose one)	
Which of the following apps when advising an individual as a dietitian	1	Use of Mobile apps to calculate BMI/Energy -protein requirements
	2	App with nutritional values and portion pictures

can improve the most your consultations?	3	Behaviour change tools- rewards scheme
	4	Behaviour change tools- encouragement
	5	App/blog to allow interaction with client

Q.4 As a student dietitian would you be interested to engage in peer-assisting learning, use of computer simulations, OSCE's during your training.	Possible options (can chose one)	
	1	I would be very interested in PAL and simulation
	2	I would be very interested only for PAL
	3	I would be very interested only for simulation
	4	I would be very interested for OSCE's
	5	I would be very interested in PAL and simulation and OSCE's

Q.5 What of the following would make peer-assisting learning (PAL) a better experience for you?	Possible options (can chose one)	
	1	The PAL leader needs to be from the year above
	2	Weekly meetings for support (social/coursework)
	3	Lecturers to be involve in PAL (as advisors)
	4	I can choose my PAL partner during my practice placement
	5	Change PAL partner half-way in your practice placement

Improving the effectiveness of library and computing inductions at the University of Hertfordshire

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Abstract

Library and Computing inductions are organised at the beginning of each academic year at University of Hertfordshire (UH). A limited amount of time with each student cohort, together with staffing issues make it difficult to cover the full range of support from Library and Computing Services (LCS). Information overload means that content amount must be limited. Data from two surveys – UH's own *Start of Term Survey* and JISC's *Student Digital Experience Tracker* – is explored to inform decisions around LCS inductions. A pedagogic analysis with a focus on connectivism is made regarding technological advances including a newly introduced online pre-induction module. Recommendations are made for how library staff can utilise newly gained time to improve students' experience in the transition to university.

Keywords: higher education; university transitions; library inductions; learning theories; connectivism; technology enhanced learning; VLEs; graduate attributes; digital literacy; digital capability.

Background

Library and Computing Services (LCS) at University of Hertfordshire (UH) run induction sessions for first year students at the beginning of each academic year. Sessions are pre-booked and vary in format according to the tutor's preference. There is a range of activities including a 20-minute Learning Resources Centre (LRC) tour, a 40 minute to one hour practical session in a PC room, a short talk in a lecture theatre or any combination of these. In 2017 an Information Hunt was launched as an alternative to the staff-led LRC tours. No cohort receives the same induction experience, and some cohorts receive no library induction. Whilst library professionals are confident about the value added by these inductions, it is questionable whether all lecturers understand the benefit of booking an induction for their students.

At the beginning of autumn 2017, at least 1944 students were given an LRC tour (compared to 2168 in 2016). At least 7611 students attended a session with an Information Manager

(compared with 9200 in 2016) (Whitehead, 2017). There is a wide range of additional support mechanisms on top of induction activities, and a vast amount of activities are used by staff running inductions to make them more interactive and enjoyable. Figure 1 illustrates the array of activities used. Effort is made to incorporate as many of the following learning theories as possible: active learning, problem based learning, kinaesthetic learning and constructivism.

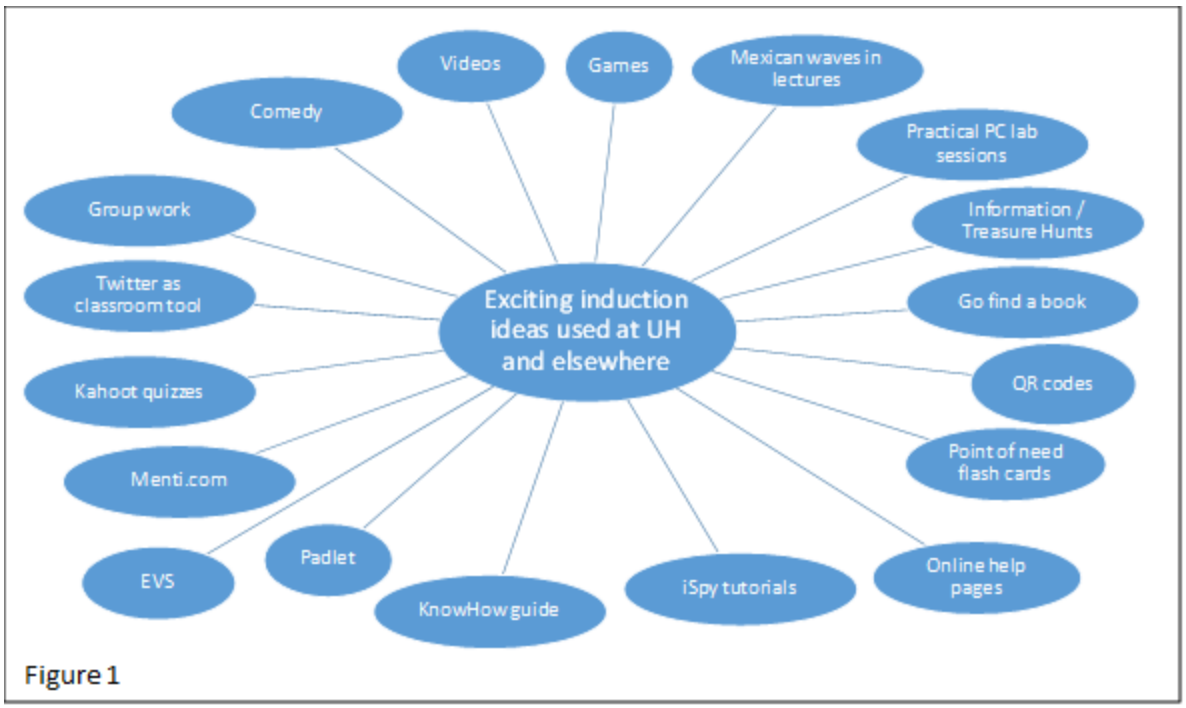


Figure 1

Issues and Debates

Compared to other UK universities, the University of Hertfordshire has a relatively small number of qualified librarians (Ford, 2015). The Academic Engagement team, which is responsible for coordination of library inductions is comprised of only 12 individuals. The university has a student population of 25,000 (THE, 2017). Providing a personable library induction to large cohorts is therefore resource heavy, and work overload for the team at the beginning of term is an issue. Limited time with students is another issue, as library staff have only a small timeslot ranging from 10 minutes to one and a half hours with new students, and of course there are the cohorts whose tutors do not timetable any LRC induction.

When students arrive, they suffer from information overload. Every area of the University wants to impart their information. Sometimes different areas duplicate information. Our students come from diverse backgrounds ranging from mature students to those straight from school; international and home students; students living on-campus and commuting students; and students with disabilities. Helen Copsey writes of the difficulties faced by mature nursing students at UH particularly during the induction period. Overreliance on

information technology is considered to be one of the largest causes of stress. Mature students benefit from a tailored, face-to-face experience and support with information technology. One tutor in her study took her students to the Learning Resource Centre several times to show them that 'it was a place that was actually going to support them' (Copsey, 2011). Younger students, on the other hand, are assumed to be so-called digital natives, yet Jones and Shao show this assumption to be a myth (Jones and Shao, 2011). Even students who are confident using technology can lack knowledge of information literacy, and particularly face challenges around online identity (JISC, 2015). Studies by Tinto reveal the experiences of commuting students as often being marked by a lack of community feel for their university campuses (Tinto, 1987) together with the logistical difficulties commuting can bring. A large number of our students are the first in their family to attend university, meaning they can have a 'Lack of cultural capital' (Wiltshire, 2014). The needs of our students are therefore diverse.

The utilitarian questions library staff ask themselves include 'How can we make the transition more memorable?', 'How can we make our inductions useful for everybody?', and 'How do we get the balance between boredom and overload right?'

Survey of prior research

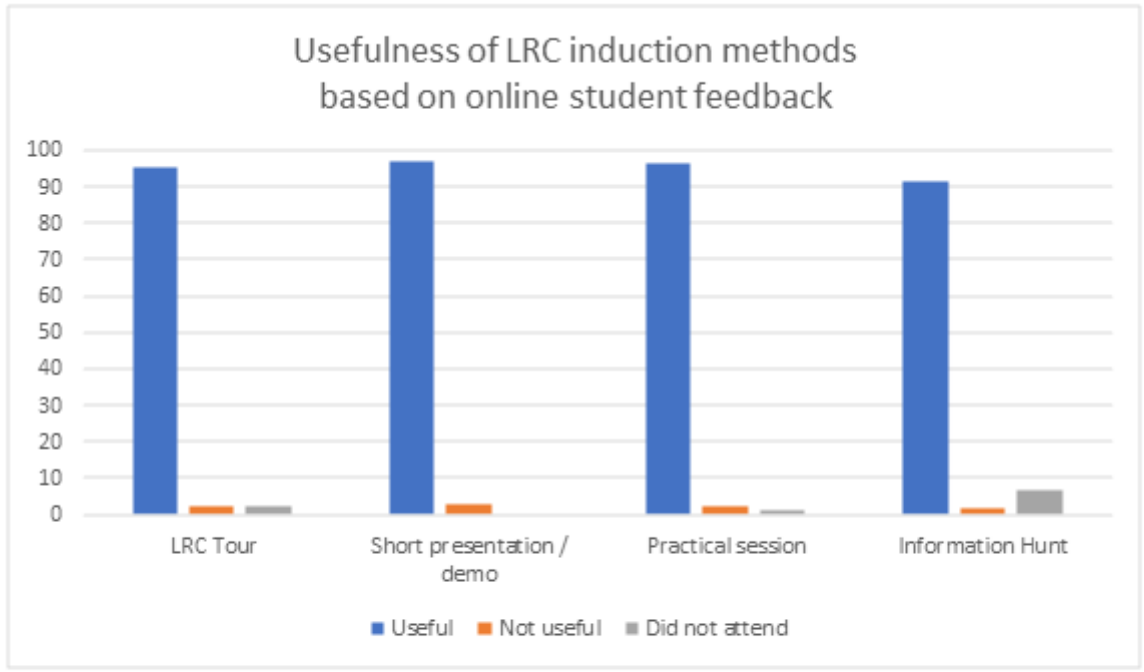


Figure 2

(Whitehead, 2017)

As I set out to write this article, I considered the range of data that was readily available. There was online feedback gathered from hands-on sessions in PC labs. In 2017, 179

students completed the online survey which is accessed via the KnowHow guide on StudyNet. Feedback was positive across all areas of the induction, as shown by Figure 2.

There was also positive paper feedback from the Information Hunt introduced in 2017, though only a small number of forms was returned. The reliability of both surveys was questionable because feedback was given immediately after the activities and it was not anonymous. Students may have been saying nice things to avoid hurt feelings, and they would not have had time to reflect on their experience.

I had had numerous conversations and workshops with colleagues including Information Managers, Helpdesk and Welcome Desk staff, LRC Security and tour volunteers. Gathering input from colleagues has been useful in the consideration of what needs to be included in our induction; however, there has always been a bias in what people deem important for new students caused by their own area of expertise.

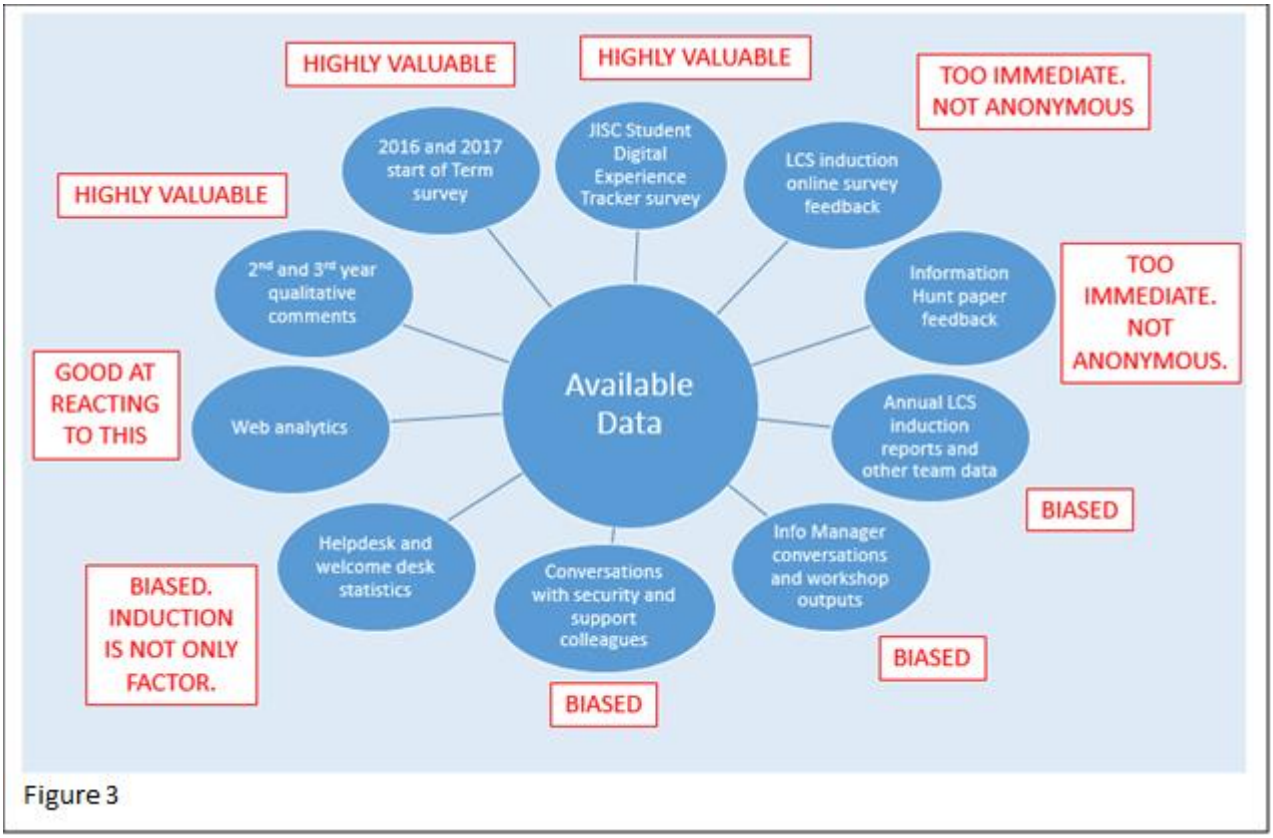


Figure 3

Helpdesk and Welcome Desk query statistics were likewise unreliable as induction is not the only factor affecting them. I could also have analysed our web analytics and feedback, but robust systems are already in place to react to both of these. Figure 3 illustrates the sources of data available together with the shortcomings of each source.

Due to the unreliability of prior data sources, I decided to focus my research qualitative comments from students outside of induction questionnaires. In 2016, UH began conducting an online Start of Term Survey. I examined raw data from the 2017 survey. I also decided to examine findings from JISC's *Student digital experience tracker 2017* for insight into

students' thoughts about the use of technology in their learning. Information from these surveys would prove useful because they were removed from the context of inductions and from LRC services.

Results of the research: *2017 Start of Term survey*

The terms 'Library', 'LRC', and 'Learning Resources Centre' appeared many times, and the majority of comments were favourable. However, there was surprise about noise levels with comments that it was 'like a zoo' (Hammond, 2017; UH, 2017d). Students lacked awareness of variety of spaces and felt that staff should be doing more to keep the library quiet. Clear signage could be a quick and cheap solution to this. The gaps in awareness would also have been addressed by the content of the LRC tour, which states that there are "different kind[s] of study areas. Choose [the] right study area for HOW you want to work," and then describes the areas including silent study (UH, 2017c). With roughly only 2000 students having had an LRC tour in autumn 2017 (Whitehead, 2017), the lack of awareness is not surprising. Due to the types of queries frontline staff receive, some colleagues state that the tour should be compulsory for all new starters. The results of the survey appeared to justify the running of tours. Having managed to show the facilities to the few thousand seemed worthwhile. Now that the content of the LRC induction had been vindicated, the next question became how to reach a wider audience?

Another area of interest from the survey for library staff were the comments regarding reading lists, and particularly the desire to have access to these earlier. Students wanted to prepare before arrival by purchasing core texts and by getting started with research. In correlation with this, there were positive comments from those whose module guides, module outlines or reading lists were ready. The readiness or lack of readiness of reading lists had a "significant impact on how prepared they felt for their start" (Hammond, 2017). This is another area which library staff are eager for academic staff to prioritise. If academics can prepare reading lists in good time, the library will be able to purchase them in good time. Even more important is the impact on the transition to university, the preparedness for embarking on a course, and the overall student experience. The new reading list project and the introduction of the Talis reading list system is helping the student transition by making resources easily accessible in a consistent manner across modules. However, time constraints faced by academic staff mean the improvements will most likely be slow to take hold.

The answers to the question "What would you say has been the best thing about the first two weeks at the University this year?" are interesting from a University-wide perspective. They refer not to facilities or to services, but to the social aspects of students' experience. Students had positive things to say about staff with badges being visible and approachable, the social activities on offer, the helpfulness of staff and other students, and the opportunity to make new friends. Another emerging theme from the survey was that

students value the LRC for being not merely a place for study, but also a focal point in their social lives and a place to meet with friends.

Results of the research: JISC Student digital experience tracker 2017

Five relevant themes emerged from the *Student digital experience tracker 2017*, a survey run by the Joint Information Systems Committee (JISC) of roughly 27,000 further and higher education students. The tracker is due to include UH students in 2018.

- Firstly, students liked the use of quizzes and polling devices, particularly when their use was anonymous.
- Secondly, students did not feel their course was preparing them for the digital workplace. JISC define digital literacies as the capabilities which fit someone for living, learning and working in a digital society (JISC, 2015). Though 82% felt that digital skills are important in the workplace, only 50% felt that their course was preparing them for it.
- Thirdly, those responding to the tracker preferred face-to-face time and were concerned that digital systems must not replace face-to-face activities. They wanted better use of technology as opposed to more of it. As Jones and Shao state, students are not entering university demanding teachers to use new technologies, and they prefer a moderate use of technology (Jones and Shao, 2011).
- Fourthly, students stressed that teaching staff must not assume that all students can use digital tools at the same level.
- Finally, students did not like inconsistencies in the use of VLEs (virtual learning environments). They felt that all lecturers should be making resources available online. The following excuses from staff for lack of engagement with VLEs were met with disfavour: lack of experience with computers, not getting around to it, and not agreeing with the uploading of resources. A lack of staff training in the use of VLEs and technology in general emerged as a source of concern for students and institutions (JISC, 2017).

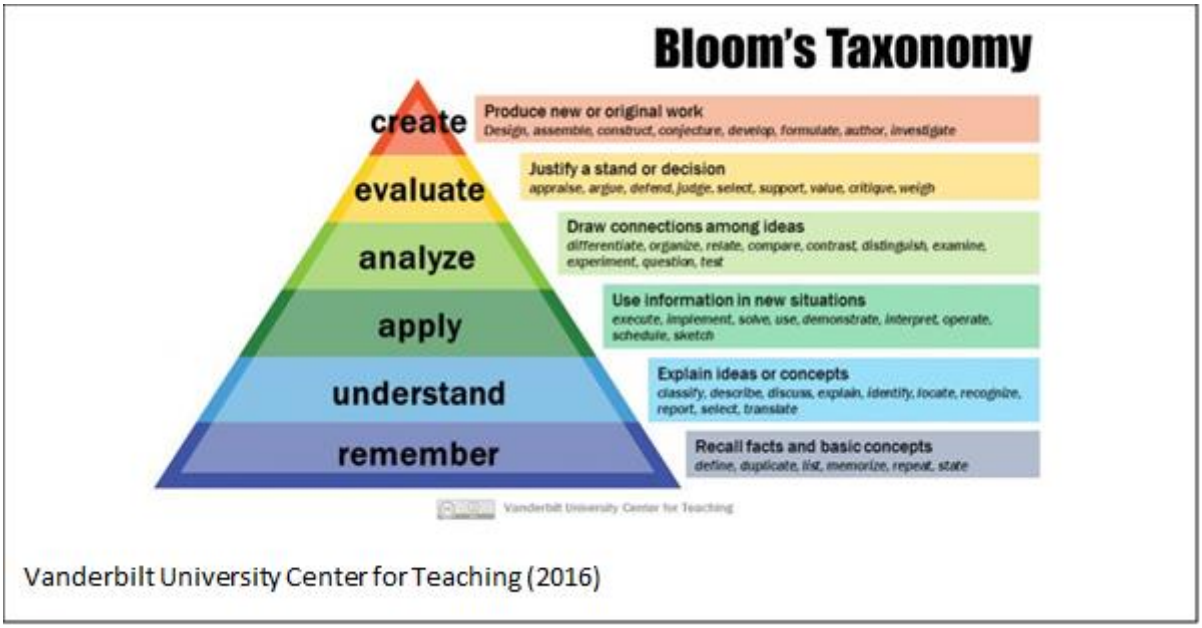
Pre-arrival information applied to pedagogic theories

LCS are very good at making their online content available to existing students particularly within StudyNet, UH's in-house VLE. Robust systems are in place for the review of our internal webpages to ensure information is clear, accurate and relevant. However, those outside of the UH do not have access to this information. Only once a student enrols do they gain access to StudyNet, and many will not engage with the VLE until they arrive on campus. Up to 2017, the only pre-arrival information about the library available to prospective students was the University's external website (UH, 2017a), the main purpose of which is marketing. The content is therefore limited, library staff have little control over it, and it is not fully relevant to those who have secured a study place.

In 2017 UH introduced the use of Canvas into StudyNet for level four modules. Canvas became the part of the StudyNet for all module-specific information. In 2018 Canvas is due to be integrated into all other modules. Among Canvas's many benefits, pre-arrival information will be possible to disseminate on a platform apart from the main University website. Work on this is already well underway with a pre-induction module available to anyone at https://herts.instructure.com/courses/518. The Canvas site, which is aimed at new students studying locally in Hatfield, can be used to impart information to students regardless of which school they will be part of. The module includes maps and short videos about campus spaces; a section about graduate attributes which ties in help from different support sections of the University including LCS; 'Before you arrive - top ten topics' from LCS. It is also due to include a digital learner type quiz. The module prompts students about things they need to do before they arrive. A major benefit of the module is that it gives students experience of using Canvas (Barefoot, 2017). Information is given regardless of which University service it belongs to, but instead a University-wide approach is taken to themes.

The module is of large benefit from a connectivist point of view. The learning theory of connectivism originates from the works of George Siemens and Stephen Downes (Downes, 2018; Siemens, 2004; krist2366, 2015; TEDx Talks, 2010). It explains how the use of technological tools can be used for making connections in learning. It recognises that technology has changed the way we learn, making earlier learning theories largely outdated. For this reason it has been termed the learning theory of the digital age. The theory places importance particularly on social interactions made through digital tools, allowing for sharing of information between people. A core skill of learning is the ability to find and meaningfully connect what you need, rather than the accumulation of knowledge, it is dynamic and adapting as new connections are formed among information, ideas, things and people (Durham University, 2017). StudyNet and other VLEs aide connectivist learning, holding tools such as blogs, groups and meetings.

It could be said that prior to the introduction of the module, our future students have been denied of opportunities: firstly that of connecting with each other, and secondly that of learning skills important for any discipline. The University is doing the right thing in disclosing more of its information in the run up to enrolment.



Vanderbilt University Center for Teaching (2016)

According to Bloom's *Taxonomy of educational objectives* there are six levels of learning: remembering, understanding, applying, analysing, evaluating and creating (Bloom, 1956). The higher the objective is on the taxonomy pyramid, the deeper it is. LCS induction and help content ranges across the taxonomy chart, beginning with the LRC tour at the bottom in the remembering category and continuing to the higher objectives.

The pre-induction module is a great example of the University incorporating a flipped classroom approach where students watch videos, complete quizzes, and work through self-paced materials before they arrive. The flipped classroom model is useful for imparting information that must be transmitted. This is clearly the LRC tour, the content of which is not deep learning. Its purpose is to nurture students to campus life. It is aligned with the purpose of Canvas module content. Information about the variety of learning spaces, namely silent spaces could be expanded with just a few sentences.

K. M. Dunaway explains the importance connectivist learning can have in the learning of library and information skills (Dunaway 2011). The i-Spy tutorials developed by UH librarians are a great example of materials which could be incorporated into the Canvas module. These self-paced tutorials fall within the deeper learning aspects of Bloom's Taxonomy, covering topics such as searching and finding Information, evaluating and verifying information, and producing academic work. As well as helping students with their studies, the i-Spy tutorials help students develop and refine the University's Graduate Attributes: professionalism, employability & enterprise; learning and research skills; intellectual depth, breadth and adaptability; respect for others; social responsibility; and global awareness (UH, 2016b). Being relevant across all subject areas, they could be aligned with the Graduate Attributes section of the Canvas module. The i-Spy tutorials and the Graduate Attributes content of the Canvas module are practical examples of what Biggs termed constructive alignment (Biggs, 2003), providing students learning activities to work through with clear intended learning outcomes.

The incorporation of an updated digital learner quiz will have its benefits. Just showing that the University is interested in students' skills is a starting point for addressing the fact that students do not feel their courses prepare them for the digital workplace. It will show our eagerness to help develop these skills, and data gathered from responses will enable us to design an extracurricular offer of digital capabilities training. From the beginning, students will understand the importance of actively developing digital skills alongside their studies.

Time won and how to use it

The welcome module will aid students becoming familiar with their campus and allow them to attain academic and digital skills. This flipped classroom approach will address the issue of lack of time that students have with LCS staff, allowing for more meaningful use of time. If using a flipped classroom approach, it is important to know what you want to do with newly gained time. If we can get the connectivist and flipped classroom approaches right, we will be able to apply more constructivism, active learning, problem based learning, and kinaesthetic learning, the activities in Figure 1. In other words, to focus on the deeper aspects of LCS information using fun and engaging methods.

Time can be used to quiz pre-arrival knowledge rather than introducing it for the first time. Expectations can be better managed and important facts reiterated. Quizzing students' knowledge about services could be done with or without the use of technologies such as Kahoot or Menti.com.

As Copsey and comments from the Start of Term Survey suggest, social integration among students is key to student satisfaction. Tinto has written about the importance of the integration of the academic and social spheres of learning. Students need to feel a sense of belonging within a university community. According to *Leaving College*, this sense is directly linked to retention rates (Tinto, 1987). Jo Wiltshire has written about how Twitter has been used to improve induction experiences of mass communications students at UH (Wiltshire, 2014). Incorporation of the tool into the programme has created a sense of community, allowed students to improve their digital skills using an industry-relevant tool, and helped them distinguish between personal and professional personas. All of the outcomes are in line with the graduate attributes agenda. LCS inductions could similarly be tailored to include more engagement with peers through interactive team activities such as games, quizzes, use of Padlet, and the continued development of the Information Hunt. These activities are already in use, but if students have already seen the basic information, it will be possible to make these activities the bulk of the LCS induction rather than a mere add-on where time permits. These improvements will not necessarily save staff time, as any activity including the Information Hunt, will still require staff presence. Sessions will still need to be timetabled, and content will still need to be agreed with tutors to ensure alignment with course objectives. The incorporation of technologies cannot be used as an alternative to time with subject experts. However, any group tasks will make the LCS induction more

enjoyable and help with the strengthening of social ties. As Siemens puts it, 'nurturing and maintaining connections is needed to facilitate continual learning' (Siemens, 2004).

The time saved could alternatively be used to focus on the more academic aspects of LCS help and the University's graduate attributes. The focal point of the induction could be research, referencing and critical thinking, skills which librarians would prefer to target. Instead of pre-booked LRC tours for entire cohorts, optional drop-in tours could still be organised for those who have not engaged in the flipped classroom.

LCS have an important role to play in the advocacy of current workplace tools such as Office365 and Lynda.com. Workshops should be run throughout the year to raise awareness of the benefits of these tools. Whilst we need to avoid spoon-feeding information, we need promote the lifelong skill of knowing how to find information. According to Siemens, 'Know-how and know-what is being supplemented with know-where' (Siemens, 2004).

Considerations

Though the pre-induction module will be of certain benefit for a large number of our students, it will of course not solve the transition issues. The module is aimed at those studying locally. It will therefore not address those who are studying online or at our partner institutions, and LCS services still affect those populations.

Likewise, we can only wish that all students were enthusiastic and able to take responsibility for their learning. As with any connectivist learning, students will be able to choose what they access. People do not read everything they are emailed. Consideration will need to be taken to ensure that students see the benefit of accessing the information, a huge issue which probably should not be left to marketing alone. The issue of a diverse student population will not be entirely addressed as connectivism is not suitable for those with less self-discipline (Accounting Videos, 2016). We will always have students within cohorts at different levels.

Another issue which cannot be addressed through the module is the availability of reading lists which will need to be announced separately. It will be a challenge to ensure a consistent approach within a set timeframe as the population of our academic staff is as diverse as that of our students. Academics already face time constraints and will need to make time to learn and engage with both the Canvas and Talis systems. LCS will need to continue to take an effective and flexible approach in the training both systems. We need to make clear the benefits which the systems will bring to the journeys of our students.

Summary and conclusions

Surveys using longitudinal qualitative data are valuable in gaining an honest appraisal of our induction offer. We should continue to analyse such data to inform the quality of inductions and our services. UH's continued cross-departmental development of the pre-induction

module will make a significant improvement to the integration of students into the University's community. LCS should continue to develop interactive activities and encourage tutors to book them. Tasks given should aide the social integration of student groups. LCS staff need to continue to advocate the benefits of the Canvas and Talis systems and invest in a wide range of technology training for academic staff and students to ensure the best possible experience for all students.

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