Blended Learning in Practice

Spring 2020

Editorial

Welcome to the Spring 2020 edition of our e-journal Blended Learning in Practice. In this edition we have six research articles from participants on the Post Graduate Certificate in Learning and Teaching in Higher Education (PGCertHE) programme at the University of Hertfordshire.

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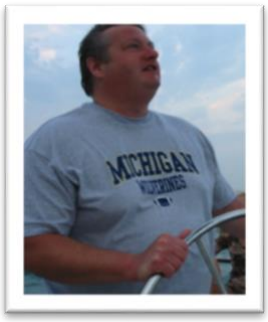

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In this edition:

Leanne Calvert critically evaluates the experiences of students who stammer in Higher Education. The evaluation considers three themes; an overview of the literature concerned with stammering in the University environment, a critical discussion of the literature on compassionate focused pedagogy and consideration of how oral presentations are assessed on an undergraduate History programme at the University of Hertfordshire.

Kevin Flynn explores the implications of adopting a 'group analytic' pedagogy in post-graduate management education. He argues that if the development of senior leaders involves building the capacity for awareness of self in relation to others, then working with and also coping with, the anxieties that emerge in the learning experience is a necessary obligation for the teaching team themselves.

Phil Gregory critically appraises the use of simulation to provide undergraduate radiography students with both the, technical skills, and non-technical skills, such as communication. It investigates whether the use of simulation is providing effective learning opportunities for students. A literature review has been undertaken along with a review of current practices at the University of Hertfordshire. Recommendations for future practice are made.

Andrew Smith explores the approaches to enhancing deeper learning on residential field trips, through the design of preparatory resources and activities in relation to an international field trip embedded within a Level 7 module. A critical review of pedagogic strategies was undertaken and as a consequence several key themes were identified which highlight the changing approaches occurring in recent years.

Through a student led workshop Laura Urbano examines how the use of exemplars in marking can be used to enable students better understand how grading criteria and the notion of quality are used in assessment. The teaching implications of adopting such approaches are discussed, and avenues for future workshop applications are outlined.

Melissa Wilton's article discusses the additional challenges that Nursing students who speak English as a second language (ESL) face when studying and working in clinical environments. The article reviews the current literature around students with ESL. Relevant literature is explored in relation to the current evidence of ESL impacting progress in nursing degree courses. Ideas for strategies to increase the opportunities to attain higher awarding grades are discussed and recommendations made

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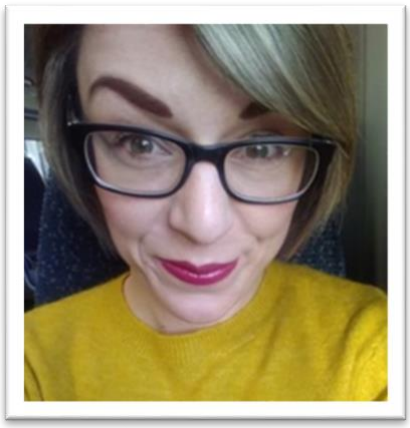

Leanne Calvert is a Lecturer in History at the University of Hertfordshire. She joined the University in 2017 as a Research Fellow in Intangible Cultural Heritage, and previously held posts at Ulster University and Queen's University, Belfast. Leanne is a historian of women, gender and the family, and her work focuses specifically on Presbyterian families in Ireland and North America, between the eighteenth and nineteenth centuries. Her current project is funded by the British Academy and you can follow it on twitter: @PPresbyterians. Leanne's contribution to BLiP stems from her interests in inclusive teaching practices. As a person who stammers, she is passionate about raising awareness in the academic community about stammering and ensuring that students who stammer achieve their potential.

Kevin Flinn

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Dr Kevin Flinn is a Principal Lecturer in Complexity, Management and Organisation at Hertfordshire Business School, an associate with Advance HE, and an Associate Member of the Institute of Group Analysis. For over two decades, Kevin has specialised in helping individuals and teams – across private, charitable, and public sector organisations in the United Kingdom and overseas – make sense of what they find themselves doing together. His first book, Leadership Development: A Complexity Approach, was published by Routledge in March 2018.

Phil Gregory

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Phil Gregory is a Senior Lecturer in Diagnostic Radiography, having qualified from the University of Liverpool in 2007. Having worked in the NHS for many years, Phil took up a seconded role at the University of Hertfordshire in March 2018. He is now contributing, part time, to both the undergraduate and postgraduate programs as a member of the Diagnostic radiography team. His work in the NHS and at UH has helped developed an interest in simulation and its applications in supporting learning.

Andrew Smith

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Andrew Smith is a Lecturer in the School of Life and Medical Sciences teaching on the BSc and MSc programmes within Geography Environment and Agricultural Subject group and as part of the School's Academic Support Unit. Andrew started lecturing at University of Hertfordshire in 2017 after completing a Masters in Sustainable Planning and working as a London-based planning consultant. He is a member of the Royal Town Planning Institute and Academy of Urbanism and now leads several modules across undergraduate and postgraduate programmes, including a residential field visit to continental Europe as part of a new European Planning Practice module. Andrew became a Fellow of the Higher Education Academy after completing the CPAD course in 2019.

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Laura Urbano is a Lecturer in the School of Life and Medical Science. She graduated with a BSc in Medical and Pharmaceutical Biotechnologies in 2011 and with a MSc in Medical Biotechnologies and Molecular Medicine from the University of Bari in 2014. She then gained her PhD in Pharmaceutical Sciences at King's College London in 2018, concerned with the development of conjugated polymer nanoparticles for bioimaging. She joined the University of Hertfordshire in 2018 as a Lecturer in Pharmaceutics. She teaches across a range of Pharmacy MSc and Pharmaceutical Sciences BSc modules and supervises both undergraduate and postgraduate students. Laura's current research focuses on the development of novel formulations for drug delivery to the lungs and of in vitro models for their evaluation and translation. She is also part of the thematic board for the Bristol CDT in aerosol sciences (EPSRC). Laura has recently become Associate Fellow of the Higher Education Academy, after completing the full CPAD programme at the university.

Melissa Wilton

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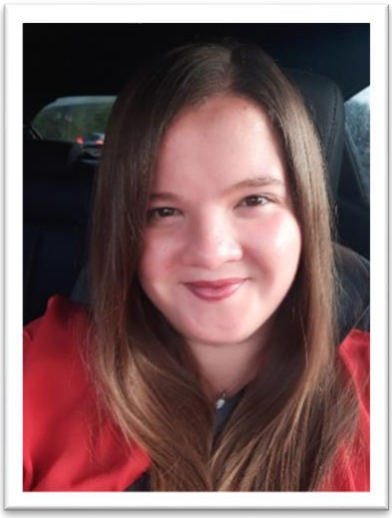
Melissa joined the Learning Disability Nursing Team in 2018 and teaches on the Student Nursing Associate Programme and Learning Disability Nursing Courses. Melissa has been a registered Learning Disability Nurse since gaining her BSc in LD Nursing and Social Work at University of Hertfordshire in 2011. Prior to commencing her teaching post, Melissa worked in the local NHS Mental Health and Learning Disabilities Trust as a Community Clinical Nurse Specialist with interests in accessible communication and access to mental health care for individuals with a learning disability.



"I'm not nervous. It's just how I talk": Stammering in University and the creation of an inclusive learning environment.

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Abstract

It is estimated that over 23,000 students in UK Higher Education have a stammer. Yet, Universities are consistently failing to support students with communication impairments. Recent research has revealed how students who stammer are discriminated against and disadvantaged by the University environment. This article aims to critically evaluate the experiences of students who stammer in Higher Education. It does this by considering three themes. Firstly, the article commences with an overview of the extant literature concerned with stammering in the University environment, and outlines the specific barriers that impede the participation of students who stammer. Secondly, the article critically discusses the literature on compassionate focused pedagogy and highlights the intrinsic problems of this innovation to the experiences of students who stammer. Building on these discussions, the article then considers the current rationale and grading criteria of assessed oral presentations on the undergraduate History programme at the University of Hertfordshire. It argues that embedding the needs of students who stammer at the point of curriculum design may actually enhance the learning experiences and outcomes of all students.

Introduction

It is estimated that 1% of the global adult population has a stammer. Stammering is a neurological condition that impedes fluid speech production. While manifestations of stammering vary from person to person, it generally takes the form of prolonged sounds; word- and sound-specific difficulties; and visible, physical tension as the speaker struggles to enunciate their words. Stammering is also a condition that carries a large experiential and emotional component (Johnston, 2019). Research undertaken by the British Stammering Association (known as STAMMA) has highlighted how stammering has a significant impact on a person's mental and emotional well-being. Nearly 90% of respondents to a STAMMA survey reported that they were bullied or teased in their school and/or work on account of their stammer, while 15% admitted that they felt suicidal as a result of stammering (STAMMA, 2019a). These results are corroborated by scientific studies of stammering. Boyle et al's (2009) study of the effects of stammering revealed that people who stammer consistently believed that their stammer had limited their life opportunities, including their

personal relationships, work-lives and education. The theme of 'missed opportunities' is a persistent issue in the growing literature on the experiences of people who stammer at University. A 2013 study by Butler, which charted the education experiences of individuals who stammered over six decades, noted that participants' stories were underpinned by one consistent message: 'school was a sodding nightmare, an absolute nightmare'. This article engages with current research on experiences of stammering in University by critically evaluating current pedagogical practices and innovations at the University of Hertfordshire. It critically engages with compassion as a pedagogical approach and suggests that it should be paired with unconscious bias training in order to make it inclusive. Furthermore, it argues that the current grading criteria for oral assessments on the History Undergraduate Programme does not meet the needs of *all* students and recommends that it be revised.

Stammering in University: barriers to inclusion

In the United Kingdom alone, it is estimated that there are between 23,000 and 27,000 students who stammer in Higher Education (STUC data). Yet, many academic studies agree that the University environment is inherently discriminatory towards people who stammer. Impediments to the learning experiences of stammerers may be caused directly by structural problems, such as lack of knowledge on stammering among teaching and professional staff, or indirectly, as a result of intrinsic biases (Johnston, 2019). Misinformation and misunderstanding about stammering underpin this discriminatory environment.

Universities are failing to support students who stammer because they simply do not know enough about the condition itself. Indeed, it is well established that stammering is perhaps the most under-reported of all categories of disability (Johnston 2019; Butler, 2013). According to data for the University of Hertfordshire, there were 2,818 students with a declared disability in the 2018-19 academic year -a figure which accounts for 11.61% of the University's total student population (University of Hertfordshire, 2018/19). Like many institutions, however, the University of Hertfordshire does not hold adequate data on the numbers of its students (or staff) who stammer. Two reasons are at play. On the one hand, Disability Services do not break their categories of reporting down to the level of individual impairments. We do not therefore have a clear idea of how many students have registered with disability services on account of a stammer or other communication disorder. On the other hand (and important for our discussion), many people who stammer choose not to self-identify as disabled. Although stammering is covered by the Equalities Act (2010), many people who stammer do not exercise their rights under this legislation. Others may not also be aware that stammering is covered by equality law. Conflicting ideas about where stammering sits in the disability community, alongside the fact that stammering exists on a spectrum, ranging in severity not only from person to person, but fluctuates day-to-day for individuals, means that experiences of stammering are not easily captured. Whereas some

people who stammer do identify as having a disability, others do not (StammeringLaw , 2019a). Stammering is therefore significantly underreported, both among students and individuals in the workplace.

The under-reporting of stammering helps to create an environment where misinformation and misconceptions about the condition can flourish. Recent research on implicit bias has demonstrated that we all hold unconscious prejudices (Fiarman, 2016). Such biases cover all aspects of human identity, including race, gender, sexuality and -important for our current discussion, disability. While people who stammer are protected by equality legislation, stammering itself is a condition that carries intense social stigma. Negative judgments about people who stammer have been reported by numerous groups and studies (Boyle et all, 2009; Weiner et al, 1988; Johnston, 2019; Daniels et al, 2011; Butler, 2013). Lower intelligence, incompetence, nervousness and lack of leadership are all traits associated with people who stammer. These 'stutter stereotypes' are perpetuated by, and ingrained in, popular culture. In film, television and literature, people who stammer are often depicted as mad, bad and dangerous -characters to be feared, pitied, and mocked. As Johnson (2008) has pointed out, stuttering is often employed as 'visual shorthand to communicate humor, nervousness, weakness, or unheroic/villainous characters'. One does not have to search long to find such examples: *Porky Pig* (1930s), *A Fish Called Wanda* (1988), or *The Waterboy* (1998). Anecdotally, the present author was in secondary education when Leigh Francis's *Bo' Selecta* (2002-2009) emerged as a hit on Channel 4. Gareth Gates, the runner-up in the first series of *Pop Idol*, who had a stammer was frequently impersonated by Francis as 'G-G-Gareth' and made the butt of tasteless jokes.

Worryingly, however, recent research has suggested that these 'stutter stereotypes' are also present in Higher Education and are held by staff and students alike. Woods and Williams' study (1976) found evidence that schoolteachers held more unfavourable opinions of male children who stammered than their fluent counterparts. These results were broadly reflected in a recent study by Dorsey and Guenther (2000) of college students' and professors' perceptions of stammering. Their research revealed that both groups held negative attitudes towards stammering. Moreover, their study also suggested that professors' views of students who stammered were more negative than that of students themselves, returning a statistically significant p-value (Dorsey and Guenther, 2000). That teachers may hold biases towards students who stammer, albeit unconsciously, has important repercussions for student outcomes. As Cheryl Staats (2016) has noted, the implications of unconscious biases held by educators can 'create invisible barriers' to the achievements of some students -an outcome that stands in 'stark contrast to the values and intentions' of those who 'dedicate their professional lives to their students' success'.

One way of tackling this issue is to provide teachers with adequate training on stammering. That better support for staff translates to better experiences for students who stammer has

been highlighted by the work of Daniels et al (2011). Their research revealed that teachers who had taken a course on stammering, or who had previous experience of working with a student who stammered, had a much more positive outlook of people who stammer. Respondents in this study were also less likely to associate stammering with psychological problems and did not express discomfort or uneasiness when faced with a student with a communication disorder. Such training and education involved information on what stammering is, the types of accommodations they should make in the classroom, and how to support and interact with students who stammer (Daniels, 2011). In 2014, an organisation named STUC, *Stammerers Through University Consultancy,* was established with the aim of supporting students and staff in higher education who stammer. In 2019, the University of Hertfordshire became one of seventeen UK universities who are partnered with the organisation. An initial focus group, which was held on campus in January 2020, set out to discuss with staff and students the best ways of supporting people who stammer at the University. Training and education on stammering will be a core part of this work.

Compassionate focused pedagogy: its limitations and problems

Compassionate focused pedagogy is about instilling in students the ability to work well together in groups. According to Gilbert (2016), compassion is not an emotion; rather, it is an action that is taken. Compassion is therefore defined as the noticing of distress and/or disadvantage to one's self or others, and then making a commitment to take action to reduce the source of that distress (Goetz et al, 2010; Gilbert, 2016). In an educational setting, compassion has been used as a way of enhancing how students interact with one and another in groups, particularly in seminar discussions. With a focus on interaction, responsiveness to others, and awareness of one's self and those around them, compassionate focused pedagogy is designed to give students the tools they need to work effectively in groups, in a supportive and collegiate manner. It is also a pedagogical innovation that has high aspirations. Compassionate pedagogy has been invoked as way of tackling the increasing number of students who report mental health issues such as anxiety and depression, as well as a potentially useful method of mitigating the national attainment gap (Gilbert, 2016; 2017). A number of case-studies have been undertaken at the University of Hertfordshire using the compassionate model and the results appear on the surface to be promising (Gilbert, 2018, 2017).

The compassionate focused approach, however, is not without its caveats. It is arguable that the underlying premise of the approach -the ability to recognise distress, may actually work to further marginalise (albeit unconsciously) the experience of students who stammer. Take for example an educational video on the compassionate approach that was designed by Gilbert and used as a teaching tool on the CPAD module 'Considering the Student Experience' (2018-19) at the University of Hertfordshire. The video centres on an assessed oral exercise being undertaken by a small group of international students at the University

of Hertfordshire. One member of the group has what is described as a 'severe stammer' and can be heard struggling to enunciate his words. At one point a student sitting at their side reaches out and puts his fingers gently on the stammering students arm. At another point, the same student puts his hand on the knee of the stammering student. These actions are commended by Gilbert as examples of compassion in practice: the student has recognised distress and has taken action to assuage it.

That this student was well-meaning is not disputed. However, as the work of Fiarman (2016) on unconscious bias has demonstrated, 'deep-rooted biases hinder our best intentions'. In this case, stammering has been perceived as distress. We do not hear what this specific student thought about the actions of his peers. Did this student feel that he was distressed? Would he even describe his speech as distressing? As Brown and Pickford (2006) have noted in relation to assessments, disabled students should be involved in helping to design alternatives to traditional forms, methods and approaches. The same applies here to pedagogical approaches -the agency of the student is important to consider. Furthermore, (as discussed above) misconceptions about stammering are perpetuated by the lack of education and information on the condition itself. Recent research has highlighted the problems of implicit bias in student course evaluations: women and people of colour tend to score more poorly than their white, male counterparts. Indeed, inequalities are at their sharpest where these factors intersect (Fan et al, 2019; Chisadza et al, 2019). One way of tackling this problem is to undergo a process of self-reflection and education. Such an approach has been lauded by Peterson et al (2019), who undertook a study that aimed to explore the best ways of mitigating the effects of gendered bias in teaching evaluations. Their study found that encouraging students to reflect on their unconscious and unintentional biases had an effect on how they ranked their teachers.

These findings have implications for our current discussion of the compassionate framework, implicit biases and stammering. Much in the same way that gender and race shape the attitudes of students, so too do misconceptions about stammering. However well-meaning, the compassionate approach alone is not sufficient to tackle the implicit biases held by students and staff alike. Indeed, it is worth noting that unconscious bias training is mandatory for staff in the History group in the School of Humanities at the University of Hertfordshire. A case can therefore be made for the inclusion of not only unconscious bias training for staff, but also for students, alongside training and education on stammering. Students should be properly equipped to recognise 'distress' and to be aware of their own implicit biases when doing so. While compassionate focused pedagogy certainly has its merits, without proper education on the unconscious biases of stammering, it holds the danger of simply reinforcing ingrained stereotypes of people who stammer. Indeed, as Deborah Johnston (2019) reminds us, the exclusion and discrimination experienced by people who stammer in higher education may actually be exacerbated by 'unreflective moves towards innovative pedagogy'.

Oral Presentations: What exactly are we assessing?

A key theme that emerges from the literature on stammering and education is that the experiences of students who stammer have relevance for other groups. This becomes clear when we consider the assessment of oral presentations. Irrespective of disability, students find oral presentations an anxiety-inducing experience (Russell and Topham, 2012; Dryden et al, 2003). A recent survey conducted at the University of West England, Bristol and the University of Plymouth revealed that over 80% of students polled experienced frequent social anxiety (Grieve, 2018). These results are reflected internationally. Marinho et al's (2017) work on undergraduate student perceptions of oral presentations revealed that almost 64% of respondents reported a fear of public speaking. Indeed, their study highlighted how these anxieties were heightened among 'marginal' groups. Among those polled, students who identified as female, those who had less experience presenting in large groups, and individuals who perceived their voices as different from the norm (i.e. high-pitched or soft in tone), reported relatively higher levels of anxiety.

Although many students find oral presentations daunting, there is a clear rationale for their inclusion in assessment. Oral presentation skills are integral to History degree programmes across the United Kingdom. The QAA Benchmark Statement for History (2014), which outlines guidance on the national standards for graduates, highlights the abilities of history graduates to marshal arguments in both written and oral forms, engage in sustained oral debate, and communicate information orally and effectively. The ability to communicate ideas and information orally to peers has relevance that extends beyond the classroom. As noted by Grieve (2019) public speaking is in fact a 'life skill'. Communication skills are therefore prized by many Universities as a key graduate attribute -the University of Hertfordshire (2020), for example, lists communication skills under the heading of 'Professionalism, Employability and Enterprise'.

The merits of developing students' oral communication skills are not disputed. The issue for both students and staff, however, is in the *assessment* of these skills. Scholars such as Brown (2006) and Al-Nouh et al (2015) have argued that the 'most critical success factor' in the assessment of oral presentations is the creation of clear assessment criteria. This is important not only for students, but also for teachers: both groups need to have clear ideas not only of what is being assessed, but how and why. Yet, what exactly we are assessing in oral presentations and how we measure student achievement remains unclear. The current guidance for the grading of oral presentations in History and Humanities at the University of Hertfordshire is a case in point. The criteria itself is problematic for two main reasons. Firstly, the rubric is frustratingly vague. While the Humanities Module Leaders' Guide (2019-20) stresses the need to explain to students how their grade was decided using a 'Shared Skills Form', information on how staff uniformly test these skills is not extant. For example,

while staff are advised to score oral presentations in terms of the 'appropriateness' of the speaker's posture and manner, what exactly 'appropriate' means in the context is not explained.

Secondly, the grading criteria is also problematic because it emphasises spoken fluency. The undergraduate History rubric (History Subject Guide, 2019-20) measures 'hesitancy', 'fluency' and 'audibility' as part of its assessment of technical 'oral' skills. The advice for teaching staff in the School of Humanities is broadly similar. Although the Module Leaders' Guide (2019-20) does contain a basic rubric for assessing oral skills, 'vocal clarity' 'register' and 'audibility' are assessed under the criteria for 'Expression'. While there is a rationale for keeping grading criteria flexible and relatively vague across a diverse programme like Humanities, the absence of explanatory reference points is problematic. Indeed, it should be noted that these are problems across the sector more widely and are not confined to the University of Hertfordshire. A google search for marking criteria reveals that many Universities explicitly penalise dysfluency (University of Exeter, n.d.).

Criteria that emphases fluency in oral presentations stems from a belief that spoken fluency and unbroken speech is evidence of comprehension. When schoolchildren are taught to read, or when English is taught as a foreign language, *fluency* is often employed as a measure of understanding (Hudson et al, 2005). Dysfluency and hesitancy -the main markers of stammering, are (under this schema) in turn regarded as signs of misunderstanding and lack of knowledge. Yet, it is important to remember that spoken fluency does not equal good communication. People who stammer have carved out successful careers in sectors that champion excellent communication skills, including air-traffic controllers, stand-up comedians, broadcasters, lawyers, call-centre operators and teachers (StammeringLaw , 2019c). Indeed, including fluency as a criterion is potentially discriminatory towards people who stammer and, in some cases, presents a basis for legal action. (StammeringLaw , 2019b). As effective communication is about more than fluency, its assessment in oral presentations is therefore ill-judged.

It is good practice to make accommodations for students with disabilities. Indeed, at the University of Hertfordshire, reasonable adjustments are decided in conjunction with students and disability advisers, and formalised in study needs agreements (SNAs). For people who stammer, these reasonable adjustments may include allowing extra time to compensate for time lost during stammering or writing their name on a slide instead of pronouncing it (STAMMA, 2019b). While reasonable adjustments should and can be made for students who stammer, it is arguable that such accommodations are merely reactionary, *ad hoc* measures that do not tackle the underlying causes of inequalities in the learning environment (Butler, 2013). As Brown and Pickford (2006) have argued, inclusive practice should enrich the experience of all students who study and work at the University. Such accommodations therefore stop at the level of the individual and miss out the benefits to be

gained by all students. This line of thinking has direct applications to the assessment of oral presentations. Indeed, as Johnston (2019) has argued, a discussion of stammering is useful in reminding teachers that they need to ensure they are rewarding content and not fluent speech. A case can be made that assessing fluency as performance is not only unnecessary, but that it has an adverse impact on the learning outcomes of *all* students, not just those with communication disorders. As Brown (2006) has highlighted, assessing performance is paradoxical: 'if we accept that the best presentations are so engaging that we do not consciously register the presenter's skills, then how can we validly assess these transparent skills?'

A possible solution to this problem can be found in the approach of Rob Grieve, who has argued that students should be coached to develop their skills as *authentic* speakers. Drawing on his experience as both a Senior Lecturer and a person who stammers, Grieve devised a series of three-hour workshops that were designed to teach students to own their voices. The workshops were conceived in response to calls from students for more information and training on public speaking. For example, Grieve (2018) noted that in a survey of 135 undergraduate students, 89% said that they would have liked classes on public speaking. Similar findings were reported by Marinho et al (2017): 89.3% of their respondents wanted specific training on oral presentations. Entitled 'Stand Up and Be Heard', the sessions run by Grieve highlighted the differences between artificial performance and authentic delivery -making it clear for students that the most important elements of public speaking were knowledge and content. Style and perfection, albeit flashy elements of performance, mean nothing when not backed up by substance. As highlighted by Grieve, fluency and a 'slick presentation' do not equal good communication. (Grieve, 2019). Following this example, it is arguable that being clear to students on what a good speaker is and what it is that makes a good presentation not only improves the outcomes of students, but also removes the ambiguity from the grading criteria.

Conclusion

This article has highlighted the benefits to be gained from examining the experiences of people who stammer in education. Focusing on stammering not only brings into the sharper focus the problems inherent in current pedagogical approaches and innovations, it also marks out possible ways of improving the outcomes for all students. Ensuring that staff are properly equipped to work with students who stammer will inevitably improve the learning experiences of those students. Other students also reap these benefits. Embedding unconscious bias training as a core part of student development enables students to be aware of their own prejudices. This has important repercussions in how they relate not only to their stammering and disabled counterparts, but also how they interact with racial and gendered inequalities more broadly. The University of Hertfordshire prides itself in its ability

to transform the lives of its students and their communities. These aforementioned approaches help fulfil the University's visions for its graduates and their key attributes: Respect for Others; Social Responsibility; and Global Awareness (University of Hertfordshire, 2020). In short, adapting the learning environment for students who stammer has the effect of enhancing the learning experience and outcomes of all students and staff.

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A group analytic approach to pedagogy in management education

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Abstract

This article explores the implications of adopting a 'group analytic' pedagogy (Mowles, 2017a, 2017b) in post-graduate management education. Drawing on the literature and a reflective narrative account of my own experience in the classroom, I argue that if the development of senior leaders involves building the capacity for awareness of self in relation to others, then working with the anxieties that emerge in the learning experience is a necessary, albeit challenging, obligation. However, in order to do this, the teaching team must be adept at coping and working with affect; not only the visceral emotions experienced and expressed by the students, but also their own.

Introduction and background

I was first introduced to what can be described as a group analytic approach to teaching as a student on the University of Hertfordshire's Doctorate in Management (DMan) programme. The DMan, developed by Professor Ralph Stacey and colleagues at Hertfordshire Business School (HBS) commenced in 2001, but its origins go back further. When Ralph first took over as Director of the MBA at HBS, in the early 1990s, one of the modules, Leadership and Change, included a residential weekend facilitated by the faculty of the Tavistock Institute in London. The impact of the teaching methods employed on these 'Tavi weekends' provoked and intrigued Ralph to such a degree that he enrolled on a programme to train as a group analyst with the Institute of Group Analysis (IGA). During this training, Ralph started to formulate the idea of a doctoral programme that put complexity and group analytic ways of working front and centre. In partnership with the IGA and colleagues at HBS, this thinking developed into the DMan. That was eighteen years ago and although the IGA, and indeed Ralph, are no longer directly involved in the programme, the principle of including at least one practicing group analyst on the teaching team continues to this day.

Group Analysis is a form of group psychotherapy developed by S. H. Foulkes in the 1940s. Foulkes, a qualified psychoanalyst, started working with traumatized servicemen during the Second World War with a view to exploring the therapeutic value of bringing individuals who had been through similar experiences together in a group to support each other's recovery (Nichol,1997a). Although this method was initially developed with clinical patients, Nichol reports that from the very start, Foulkes identified the potential for group analysis to

be of use in educational settings. He saw group analysis, and working in a group analytic way, as a method of developing 'responsible citizens…of a free and democratic community' (Foulkes and Lewis, 1944, cited in Nichol, 1997a: 93-94). The Group Analytic Society International (GASI) describe group analysis as a therapeutic approach that supports people to develop their 'social and interpersonal functioning' with a view to 'better integration of the individual with his or her community, family and social network' (GASI website, 2020). So, what does teaching in a group analytic/psychodynamic way look like?

As a research student on the DMan programme, it involved alternating between working in learning sets (small groups of three to four students with their research supervisor) and working in community meetings (the whole group of ten to fifteen students and five faculty). In each of these groups, we were encouraged to spend at least as much time noticing, commenting on and processing how we were working and interacting as a group (and how we as individuals experienced ourselves in relation to others), as we did on our research topics. Indeed, these two things were not mutually exclusive; the pedagogy influenced our research and our research influenced the pedagogy. In addition, my three years (2008-2011) working in this way on the programme directly influenced how I was working with the groups of managers involved in the development programmes that I ran at the University of Hertfordshire (UH), as Head of Leadership and Organisational Development, and the student groups that I was involved with as a Visiting Lecturer on the HBS MBA programme[1]. And, as is apparent from the literature, the DMan is not the only programme that works in this way.

Literature Review

Mowles (2017a) argues that working with 'group analytic methods, as adapted for the research environment' helps manager-participants to learn to cope with three things: 'uncertainty and the feelings of anxiety which this often arouses; thinking about leadership as a relational and negotiated activity, and encouraging reflexivity in managers' (Mowles, 2017a: 1). Mowles uses the term 'experiential group' as it is 'used in group analytic practice to distinguish a group run along group analytic lines but without the explicit purpose of therapy' (ibid: 7). However, he is also keen to point out that although it is not therapy, working in this way can have therapeutic outcomes for those involved:

> *For example, researchers who may not start out self-aware about how they are experienced by others become more so with time and develop a maturity in noticing patterns of behaviour, both their own and other people's which are called out in the group. Participants are able to develop a greater reflexive ability over time: they become more practiced at noticing their habitual ways of being in relation to others because they catch themselves and/or they have their habitual patterns pointed out to them by other members of the group (ibid: 8).*

However, teaching in this way brings its own challenges. Nichol, argues that 'pain is a characteristic feature of the experiential group', but it is 'also a feature of professional training and development in areas such as management and teaching, but one which is not acknowledged' (Nichol, 1997a: 93). Nichol argues that the types of pain experienced by patients in therapy groups, that is, anxiety, shame and grief, are an 'inevitable feature of [any and all processes of] learning and personal change' (ibid: 93).

During his own training and development as a group psychotherapist, Nichol became interested in the parallels between the pain that patients experienced in therapy and the pain that he and his fellow students encountered during the learning process. This interest became the focus of his own doctoral research (Nichol, 1992). As a participant-observer, Nichol carried out surveys and semi-structured interviews with his fellow student cohort as research for his doctoral thesis and found that participation in experiential groups can produce:

- Anger (which is often expressed towards the group conductor whom they feel is failing them)
- Anxiety (at the prospect of having to self-disclose)
- Threats to identity (as Individuals become painfully aware of [uncomfortable] aspects of themselves) due in part to the fact that groups can 'open you up' (Nichol, 1992)

Nichol (1997a) also found that experiential groups provided space where 'things which were painful were often shared by others, which gave rise to a common experience of not being alone' (ibid: 99). Although his research was with fellow students training to be group psychotherapists, Nichol feels that his findings have direct relevance to managers and management development. He stops short of advocating the inclusion of therapy groups in management education, but he is adamant that experiential groups are requisite, as anything less would be to short change not only the management student but also the people that they will continue and/or go on to manage.

Clancy and Vince (2019) refer to the challenges of working psychodynamically as the 'shadow side' of experiential groups in the classroom (Clancy and Vince, 2019). Like Nichol (1997a), Clancy and Vince argue that the difficulties of working with management students in this way are worth enduring, as the shadow side is 'an important aspect in engaging with the emotional complexity of experiential learning and how this can inform management and leadership thinking and practice' (Clancy and Vince, 2019: 175). In their article, they share a reflective narrative account of working with a group of student-managers during a week long experiential module. The module often attracts students to the point of oversubscription, partly due to the fact that the module is often described as 'different' by previous attendees. However, it is this very difference that provokes anxiety and in the

example they share, this anxiety comes to a head when one of the students tells 'the professor to "fuck off . . . if I want to feel my feelings I'll see a bloody shrink."' (ibid: 175).

For Clancy and Vince, working in a psychodynamic way means that students 'engage directly with underlying emotions and implicit power structures that are created in the classroom' (ibid: 176). Their aim as teachers is to 'help students notice and interpret emotional and political dynamics in organizations through noticing and interpreting them in the business school classroom' (ibid: 176). For Clancy and Vince, this calls on the lecturer to do two things. First, 'to engage with emotions and power relations in the classroom' by holding student's 'in the moment' with a view to generating "here and now" experience from which they can feel their reflections on leading and managing as a prerequisite to understanding them' (ibid: 176). And second, to draw attention to 'power relations (e.g., differences of gender, class, race, culture apparent in the classroom; or broader tensions and dynamics that have developed in the course group)' with a view to bringing 'to the surface a tension at the heart of organizations' (ibid: 177). They add:

> *For the professor, the approach requires the capacity to think under emotional fire, to withstand the projection of students' hatred and anxiety, to learn from one's own feelings as well as those of others, and to reframe what is happening into nuanced interpretations offering insight for students. Staying in the midst of this discomfort and commenting on its value rather than fleeing from distress is a core feature of the delivery of a psychodynamic approach to experiential learning* (ibid: 177).

As means of critically appraising and analyzing the pedagogic theory and implications of working with (management) students in this way, I will compare and contrast the thinking explored in the literature above with the following reflective narrative account from my experience.

Leadership and Change

It's Sunday afternoon, the first session after lunch and the last on the third and final day of the second weekend of the Leadership and Change Module that I teach on as part of the MBA programme at HBS. It has been an eventful few days. A sub-set of the thirty strong group of students present have introduced a number of tables into the circle of chairs that formed the pre-lunch room layout. The sub-group has chosen to position the tables, they are now sitting behind, at the front of the room, positions where, before lunch, at least one or two of the five strong teaching team were seated. The rest of the group settle into the chairs that remain from the original circle.

On the preceding Friday (day one of this three day, second and final weekend of the module), there had been two separate heated exchanges between members of the teaching team and

students. One in the morning, one in the afternoon. In between these two incidents, we discovered that one of the teaching team had transgressed the boundaries we had set around drafts for the first assignment. The students who had benefitted from the advantage bestowed, shared this information with other students, who then shared it with a member of the teaching team. It would be fair to say that some students were less than happy. All in all, it had been a tough day and I was quite relieved when it was over. On arriving home, I got a call from the Module Leader. She was ringing to get my views on something one of the students shared with her at the end of the day. Following the session, she had asked one of the students for their reflections on the day and he told her that he thought the learning environment was hostile and that some of the teaching team had been 'pea-cocking'. My colleague asked my opinion re next steps and I said we would need to practice what we preach and address it with the cohort in the morning - first in learning sets (small groups) and then in plenary (whole group).

This we did, first thing, Saturday morning. The accusation that the learning environment was hostile did not resonate with the vast majority of students in the small group discussions. Indeed, the fact that we were even asking seemed to baffle many of the students who reported that they were enjoying the module and did not feel that there was anything amiss. Following the small group discussions, there was little appetite from the students for exploring this further in plenary and they expressed a wish to get on with the day. The remainder of Saturday passed by without incident. A direct contrast, then, with the actions of the small group of students on Sunday afternoon. They not only introduced the tables into the circle of chairs, but also berated the teaching Faculty for the 'real' and perceived injustices they had experienced. We waited for this 'vent' to subside before calling it a day. The thing that struck me (unconsciously on the day, but consciously as I reflected on this in the days to follow) was the make-up of the group of students who introduced the tables.

The majority of students in the cohort, some seventy percent plus, work for the same institution. Although most of the individual students don't work directly with each other, some do. The majority of the sub-group who had introduced the tables were general managers, not a single specialist. The following Friday I found myself travelling by train to the GASI, Creating Large Group Dialogue in Organisations and Society (CLGD) programme I am currently involved in as a student. As the train hurtled along, I wrote in my CLGD reflective journal the following summary of my experience of that session - white, male, middle-class, managers, mansplaining to the rest of the community…Dicks getting in the way of dialogue. I wondered whether our experience in the classroom somehow paralleled the relationships we find (between the generalists and specialists, the managers and staff, the included and excluded, the haves and have-nots) in most organisations? Society?

Discussion

I/we have been working psychodynamically with students on the Leadership and Change module for over a decade now and incidents like the one described above are not unusual. On several occasions we have had chairs replaced by tables, and challenges to our authority are a regular feature of the module. These incidents often parallel the power relations, polarities, inequalities and injustices that we all encounter in organisations and society. For some, these hide in plain sight, whilst for others, they are all too visible. Indeed, if students do not challenge our authority at some point during the two teaching weekends, we feel that they have missed out on the opportunity to explore the parallels between struggling to relate to each other on the module and the day-to-day struggles that they will/are encounter/encountering as figures of authority in organizational settings. Our ability to work with students in this way is one of the contributing factors to the success of the module which, akin to the module described by Clancy and Vince (2019), garners extremely positive student feedback, both immediately following the sessions and long after the module has ended. So why, on this occasion, did we pass up the opportunity to work with the 'frustration and rage' (De Maré, 1990) present in the group to explore what it means to be 'responsible citizens…of a free and democratic community' (Foulkes and Lewis, 1944, cited in Nichol, 1997a: 93-94)?

In our reflections as a teaching team, a day or two after the incident, we post-rationalised our relative failure to sufficiently explore what happened with the following; i) there was not enough time left in the session/day to do the potential learning justice, ii) the module was ending and it would be inappropriate to open something up without the opportunity of processing it fully, and iii) our best response in the face of such attacking behavior was to make no response at all. This is not the first time we have missed and/or passed up the opportunity to explore one of the many interactions that happen between staff and students on the module (often for the very reasons outlined above), and it won't be the last. However, for me at least, this incident had a different quality to it. My reasons for not stepping in stemmed from a combination of i) not having a clear enough grasp on what sense I was actually making of what might be going on in the moment, that is, I was not able to 'think under emotional fire' (Clancy and Vince, 2019: 177), comprising of, ii) anger that our colleague's transgression of boundaries with regards to drafts had muddied the 'group analytic' waters, iii) fear of saying something to and/or about my colleague that I might later regret, iv) fear of saying something to and/or about the sub-group that I might later regret, and v) a generic anxiety regarding the ethics of 'calling out' said sub-group in front of their peers.

It is my contention that in as much as students experience the anger, anxiety and threats to identity in the learning experience that Nichol (1992) describes above, they are also as keenly felt by the teaching staff. I agree with Clancy and Vince when they argue that as

teachers we must learn to tolerate the 'emotional force of the attack, while also creating an environment in which it can be examined and understood in the service of learning' (Clancy and Vince, 2019: 175). Indeed, as outlined above, this is something that we are usually adept at exhibiting, so why not on this occasion? I have written previously about the need for manager-leaders to develop the capacity for 'reflexive curiosity' (Flinn, 2018). Reflexive curiosity involves sense-making, reflexivity and practical judgement, that is, making sense of the context in which one finds oneself, thinking about and challenging how one is thinking and deciding on the most appropriate next step to take in the circumstances (ibid: 174). However, in order to do this, one must be able to acknowledge and work with emotion, not only that of others, but also your own. If one is too caught up in what is going on, then it becomes difficult to think clearly. That is, it is difficult to become 'more detached in one's involvement' (Elias, 1994) and this has implications for the quality and speed of one's capacity for reflexive curiosity/practical judgement. I believe that this goes some way to explaining what might have been happening for me and the rest of my colleagues in the teaching team during the incident described in the narrative above.

If there is an award for a clear-cut example of the how the emotions involved in trying to relate to each other, particularly in times of conflict, can get in the way of thinking, then the incident described above can legitimately stake a claim. Patrick De Maré argues that 'whilst the problem for a member of a small group is how to feel spontaneously, for the large group it is primarily how to think' (De Maré, 1985). De Maré contends that the rudimentary problem for large groups is the potential for 'mindlessness', which has to be held and worked with if we are to work towards what he sees as the opposite of this, that is, dialogue (ibid). I agree with de Maré. In contrast to mainstream approaches to managing emotions at work, which advocate the development of 'mastery' over them, as exemplified in Daniel Goleman's (2006) conception of emotional intelligence, I am arguing that rather than denying or suppressing our emotions we should learn to work with them. Consequently, for me, working in a group analytic way with management students becomes imperative. In the incident(s) described in the narrative above, the most useful learning for students and teachers may well have come from what we didn't discuss. That is, i) the parallels between what was happening in the classroom and what might be playing out in our own organisation(s) and ii) the potential for us, as human beings, to enter a state of 'mindlessness' in the presence of strong emotion and the implications of this for us as manager-leaders. One might argue that, irrespective of our experience of working in and with emotionally charged learning environments, there is just as much potential for us as a teaching team to become dicks who get in the way of dialogue.

Conclusion

In this article, I set out to illustrate and explore the implications of adopting a group analytic pedagogy in post-graduate management education[2]. After reviewing the literature and

reflecting upon a reflective narrative account from my own experience, I contend management educators are duty bound to work with students in this way. Conventional pedagogical approaches to management education have a tendency to normalize the denial and/or suppression of strong emotions in the workplace (in emotional intelligence terms, to gain 'mastery' of one's feelings (Goleman, 2006)); covering over not only the creative but also the potentially destructive forces at play. A group analytic approach to teaching encourages students to work with affect, both their own and that of others, as a means of exploring and developing the compassion and humanity required of a responsible manager-leader/citizen. However, the challenges of working in this way, for both students AND staff, should not be underestimated. I am not suggesting that all management educators need to be trained as group analysts (or equivalent), but I am arguing that students AND teachers need to develop their capacities for reflexive curiosity (Flinn, 2018). However, I also acknowledge that even where one considers oneself to be adept at working with emotion, it is neither possible, nor wise, to process every incident that arises in the classroom. On these occasions, we might afford each other a little of the compassion that we are encouraging our students to develop in their own praxis.

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Enhancing undergraduate learning in diagnostic radiography, the use of virtual reality and real time simulation.

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Abstract

Simulation is defined as the imitation of a situation or process. Within diagnostic radiography, which is a heavily process based profession, it is an essential tool for teaching students. The diagnostic radiography programme at the University of Hertfordshire (UH) is the largest of the 25 around the United Kingdom. Its students routinely engage in both physical simulation (the university has its own x-ray rooms and computed tomography scanner) and have trial access to a PC based virtual reality simulation suite.

This paper intends to critically appraise the use of simulation to provide undergraduate students with both the technical skills, such as radiographic positioning, and the non-technical skills, such as communication, which they require in order to take on their professional duties. It will investigate whether the content and application of simulation is providing the best learning opportunities for students and ensuring the best outcomes. Relevant literature has been extensively reviewed to explore how and why simulation has developed into an essential tool for the teaching of healthcare professionals. A critical review of current practices at the university has been undertaken with some potential recommendations for future practice.

The literature suggests that improvements can indeed be made to the provision of simulation pedagogy at UH. This should include changes to the variety and complexity of simulation to develop non-technical skills and improvements to the vital use of the debrief. In addition, the simulation lead should be further supported to ensure that the structure and importance of simulation is given increased support and interprofessional education can further develop.

Introduction

The University of Hertfordshire (UH) provides the largest undergraduate degree programme for Diagnostic Radiographers in the United Kingdom. The cohorts are very large, often numbering 100 or more, diverse with approximately 50% of students identifying as from a BAME background (UH, 2014) and have a significant intake of mature students.

The profession of radiography is a heavily process based vocation, often requiring quick decision making and improvisation. This is due to the huge variation in patient presentation, equipment available and imaging required. In order to support students in learning appropriate skills and knowledge during the undergraduate programmes the university provides access to 'traditional' lecture-based activity and more recently simulation-based pedagogy involving role play or interaction with software for example.

Simulation is widely used throughout medical education programmes, not just within radiography. It can take many forms, from recreating a working environment, such as a fully functioning x-ray room, to a virtual reality (VR) environment with a focus on learning how to position equipment and set its parameters for imaging of different body areas, the current software on use is on trial.

The purpose of this article is to review the current literature regarding the use of simulation, with this information in mind a critical appraisal will be undertaken of the current use of simulation at UH, for the undergraduate diagnostic radiography programme. This piece will seek to find new and/ or improved methods of implementing simulation pedagogy to the ultimate benefit of student learning, also considering the author's experience as both an undergraduate radiographer and current role as a senior lecturer at UH.

Literature review

In order to establish a comprehensive picture of the different uses of simulation, a literature search has been undertaken which has considered not only this pedagogy within radiography but also in other medical disciplines such as nursing, radiotherapy or medicine itself.

An extensive literature review of simulation benefits in radiography demonstrated positive impacts on student confidence, understanding their professional roles and its value for both undergraduate and postgraduate education (Shiner, 2018). It is not just the student who benefits from the simulation process. A small study has shown that by creating multiple simulation sessions with linked learning outcomes throughout a module the educators themselves demonstrated an increase in their self-efficacy (Holdsworth et al., 2016). Indeed, the author has found simulation, both as a student and now as a lecturer an extremely rewarding process.

Simulation encourages the learner to actively participate. It therefore closely aligns itself with models of experiential learning initially described by Kolb (Kolb, 1984), a cycle defined as concrete experience, reflective observation, abstract conceptualisation and finally active experimentation, and further developed around these themes (Gibbs, 1988). The classic

model of simulation is framed as a pre-brief which gives the students information about their tasks, intervention which refers to the participatory aspect and then a debrief which is an opportunity for the learning facilitator and/or the student to ensure learning and reflection (Fanning and Gaba, 2007). Using these models, we can consider how student learning can be facilitated.

Within radiography, the use of simulation as a pedagogy has been widespread, throughout higher education institutions, largely through the utilisation of fully functioning x-ray rooms on campus. This would be an example of concrete experience or kinaesthetic learning (Fleming and Mills, 1992). The participant able to physically move and manipulate the equipment and in doing so learning. It is the author's view that there really is no substitute for this hands-on opportunity, it provides a rapid transfer of learning, both initially in developing basic abilities to even developing adaptation skills. This concept of transfer of learning suggests that learning is enhanced where the content is relevant to a potential reality (Simons, 1999). Student learning also benefits from the use of scaffolding (Bruner, 1985; Gaba, 2004). That is a gradual learning process where initially the basics, both technical and non-technical, are developed before more abstract concepts are introduced over the duration of the programme. It is the authors experience that this is not always the reality. It relies upon student motivation, if the student does not apply themselves to the initial learning of the 'basics' they cannot then reap the benefits of this approach. This adds to the importance of the initial simulation offering, ensuring the student is properly engaged in their learning.

Learning in simulation is not exclusive to those actively participating. Those students who are observing can also benefit. One large study within student nursing demonstrated how even with large cohorts' simulation could become a rich learning environment, with the observers used to provide feedback through completing checklists of what was expected versus what was seen, this is a clear example of reflective observation (Kelly et al., 2016). This study also shared the utility of observers 'prompting' those actively engaged through simple indicative visual aids. This idea raises the concept of student engagement. A comprehensive literature review compared the learning outcomes of observers with those actively participating, with subsequent consideration of how to improve the observer outcomes. These were all shown to improve when there was a motivating factor. This included the use of observer tools (such as checklists) or clearly defined roles such as contributing to the debrief sessions (O' Regan et al., 2016). The size of the cohorts at UH does provide similar challenges and perhaps this idea of using the observers with tools and roles can enhance engagement, which in the author's experience is a major challenge.

Another aspect of simulation which must be taken into consideration is fidelity. This is a measure of how faithfully simulation reproduces the environment a student may find themselves in. Simulation of course being a far more controlled and ultimately risk-free

environment in which the student can learn. The level of realism which can be generated during simulation, attempting absolute fidelity, directly impacts upon the learning experience of the student (Tun et al., 2015).Fidelity of simulation has caused some debate amongst those involved in education. Initially it was felt that the more realistic a simulation then the greater the learning outcome (Dieckmann et al., 2007). However, others have suggested that there is a limit initially to the cognitive load of a student during simulation , this was a concept described as mental modelling (Landriscina, 2009). The fidelity of simulation has become more specific to learning outcomes. Examples of this include the use of moulage to simulate major traumatic injury (Shiner, 2019). This was a small-scale study, but it did provide an insight into how innovative simulation could help the students learn non-technical skills. This is supportive of enabling abstract conceptualisation in that they learn how to deal with a rather shocking appearance and consider the impact their body language and facial expressions could have on the patient. Based on the author's career in radiography, dramatic patient related events are not predictable and the ability to recall and execute learned skills in these situations is essential. Another study allowed students to simulate the physical limits faced by some elderly patients, through the wearing of a restrictive body suit. This process directly impacted on the student's attitudes towards the elderly, helping them to develop empathetic skills (Booth and Kada, 2015).

Interprofessional education (IPE), this is defined as activity involving two or more professional groups, is another area which relies upon the utilisation of simulation. The World Health Organisation has repeatedly made IPE a key expectation of healthcare professionals training programme (Gilbert et al., 2010). It has been demonstrated that IPE activity results in rapid progress in communication skill development amongst students (Poore et al., 2014). Once again this is an example of simulation being used to help develop non-technical skills. During the author's undergraduate and indeed postgraduate training IPE provided access to a huge learning opportunity, developing skills which cannot be learnt in a lecture or via a textbook. Simulation here perhaps, provides the optimal way of developing such skills. Other studies have shown the importance of IPE simulation in addressing shortfalls in knowledge. As an example, an IPE simulation involving level 5 radiography students exposed them to a trauma simulation, with clear benefit to both their confidence and understanding of professional roles in such a situation and to those of other professions involved (Brown et al., 2016).

VR simulation has taken up a significant importance in healthcare education. There are many benefits to VR, these include the ability to create a risk-free environment for the student, one in which they can learn by repetition and failure (Shanahan, 2016). When compared with more traditional role play it has been shown that students really benefit from this feature. Furthermore, a sample of 76 radiography students felt no lack of access to learning from the use of either format in developing their technical skills (Sapkaroski et al., 2019). It also provides a highly accessible medium for students, not requiring the learner to

be physically in a simulator, they can learn in their own space, in their own time, particularly useful for diverse cohorts. Another example of its utility, beyond the practical skills, is the creation of virtual patients to allow the development of so called non-technical skill sets as described earlier.

The simulator provides a simulation of interaction with patients and so develops a student's ability to deal with stress, make them more aware of their situation and attunes their decision-making processes. This is particularly pertinent when it has been shown that up to 80% of errors occurring in healthcare are due to a breakdown in communication (Peddle et al., 2016). VR also can be adapted to support learning in large cohorts such as in medicine. One such programme resulted in the students becoming significantly better at role play following initial VR training (Bridge et al., 2014). The lack of a more formal debrief perhaps is a weakness of VR, particularly software which is individually accessible and therefore self-debriefing must occur. The value of debriefing is enormous, self-debriefing is as yet a poorly researched aspect of VR simulation (Lapum et al., 2018).

The debrief provides an opportunity for feedback on the students' performance and opportunity to focus their learning, which is an essential aspect of good teaching (Chickering and Gamson, 1999). There is also the opportunity for students to reflect upon their experiences. It has been described as the heart and soul of any simulation (Fanning and Gaba, 2007). Understandably this is an area of heavy discussion, a medical school simulation raised issues such as the provision of written feedback and the importance of direct feedback which is constructive and not vague. Indeed, real learning can only take place if the student is made aware of specific areas requiring development (Burns, 2015). It is the author's limited experience that there is a variation in both the timing and content of the debrief provided during simulation at UH. There is extensive literature demonstrating the value of the debrief to enhance student learning outcomes. A literature review of methods of debrief, whilst not suggesting a 'best' format did agree upon its importance (Sawyer et al., 2016). Examples of the format of debrief included providing novice students with during-event input, to self-debrief using a written template or providing video playback of activities (Tutticci et al., 2018). The use of a written debrief document certainly appears advantageous in terms of signposting learning and providing the student an opportunity to reflect.

Putting theory into practice at UH

To support learning in the undergraduate programme at the university there is provision of fully functioning x-ray imaging equipment, a computed tomography scanner and a computer laboratory with a VR software programme capable of simulating several different modalities. As an example of a module structure at level 4, students are provided with 9

separate hour-long simulation or 'lab' sessions and one 3-hour VR trial software session with associated competencies to be completed. The challenge which this piece seeks to address is how to make the most of such simulation sessions and consider how it can maximise learning.

At present, the undergraduate programme largely focuses all its simulation efforts on developing process based technical skills. This may be a consequence of the pressure to ensure basic levels of competence prior to time on placement, driven by cohort size. It is of detriment to the students in learning non-technical skills. The utility of simulation to encompass other, often complex, topics as has been adopted in other healthcare professional education programmes (Kirby, 2015). The literature clearly supports increased focus on simulation-based activity, non-VR, to enhance student non-technical skills. The example of using moulage to help the students develop coping mechanisms (Shiner, 2019) should be duplicated or taken further at UH, for example with simulated inebriated, confrontational patients or even other health professionals.

A key challenge which the author believes requires addressing is that of engagement from both staff and students. The significant pressure on educator time created by large cohorts restricts the ability to evolve the teaching methods used. To the author the programme provided by the school of radiography is limited by this. The current lecturer cohort has also been established for many years which perhaps creates a 'novelty' feel to more complex simulation, this has been the initial experience of the author as both an observer and whilst actively participating. If the student does not 'buy in' to the simulation they will not engage and may demonstrate almost cavalier approaches (Krishnan at al., 2015). At the time of writing some VR sessions are being provided unsupervised which means the only immediate debrief available to the students would be that of the software. The author is aware of some initial student feedback which suggests a mixed opinion towards these sessions. Students from younger age groups provide positive feedback, however more mature students are not realising the benefit of the sessions. Perhaps a virtual 'helpdesk' maybe the solution to this, to ensure there is help at hand, albeit remotely.

There is a member of staff nominated as a simulation lead but there are significant challenges to develop simulation further. A recommendation of this paper would be to create a simulation committee to help share the workload and further encourage creativity and innovation, perhaps it could include student input.

Engagement is also affected by both the cultural and generational diversity of the cohort. In terms of fidelity, as has been shown elsewhere (Booth and Kada, 2015; Shiner, 2018) students are able to rapidly learn and adapt in environments with high fidelity. At UH there is a high-fidelity experience provided during role play laboratory sessions. The equipment used is of a good standard, it is intuitive and often the simulation takes places using

scenarios and encouraging students to participate. It is the authors experience however that the level of engagement from the students varies. Perhaps by introducing so many different variables to scenarios students are overwhelmed with information, this is a theory described as cognitive load (Reedy, 2015). This hampers the learning outcomes for those students without any previous experience in such an environment. The fidelity of the environment can also be impacted by intervention from those who are facilitating the session. There is a balance to be maintained between the students learning through error, and ensuring they are learning and developing the correct skills. This lends itself to the theory of the 'a zone of proximal development' (Vygotsky, 1978), a theoretical gap between what an individual is capable of alone and what they can achieve with some support.

This constructivist theory suggests that for learning to take place a student needs to have scaffolded experiences. Therefore, a suggestion from this paper is that the use of real-world (i.e., Non-VR) simulation is given far more importance in the curriculum. It should be structured such that over the duration of the course the student is challenged in increasingly complex ways. Their initial experiences in simulation should be closely guided by a lecturer. However, as they progress from level 4 to 6 the balance should shift from the more basic to the extreme. An example being for level 6 students a high-fidelity dramatic experience including blood, simulated pain, restricted movement, equipment failure etc. Their development during this process is also an informal method of assessment, the facilitators and observers will be able to judge development of their skills. The input from those facilitating more complex (level 5/6) sessions should be restricted to post intervention feedback. This incremental approach will help to support independent problem solving which is an essential tool for the newly qualified radiographer (Naylor et al., 2016). This will prove a challenge, given competition for space in the skills laboratory with other schools, but at the same time some activities could become shared learning opportunities with these programmes.

To further improve engagement, it is suggested that all simulation should see the introduction of the previously described observer tools (Kelly et al., 2016) which will support debrief and ultimately reflection becoming habitual if it is instilled from level 4 onwards. Dedicated debrief time should become a normal arrangement for simulation sessions, to facilitate deeper learning and reflection.

A VR software programme, being trialled, has been installed onto each PC in a large computer laboratory. This focuses entirely on technical skills, a possible future action could also be to develop the virtual patient interaction , as utilised elsewhere (Peddle et al., 2016), to help develop non-technical skills. Whilst intuitive VR simulation is a very scripted and mechanical exercise. Students are asked to complete competencies, but the software itself provides poor feedback. Once a virtual x-ray exposure has taken place, the student has a 'real image' icon to click which instantly corrects any errors (for computed tomography

tasks, mistakes are indicated by red text, correct setting selection is indicated by green). This is not a debrief, there is no structured breakdown of where the student could improve nor any assessment of their learning. The students are encouraged to capture screen grabs of their completed tasks, contrasting with the practical sessions with immediate opportunity for feedback and a later debrief, along with potential for the observer to reflect on practice.

At present VR clearly has its limitations in fulfilling an experiential learning cycle. It could provide opportunities using a behaviourism theory (Skinner, 1938). The repetition of processes, which only for one imaging modality are validated by the 'green ' text or through using the 'real image' toggle from the software, and accompanying competencies which students have to work through provide extrinsic motivation and reinforcement but in the author's opinion it does not, in its current format, provide life-long learning. There are other versions of this type of software, which are being utilised in the UK. One study has even suggested that VR may be a suitable alternative to practical experience for level 4 students, with statistically significant improvements in some aspects of their skills (Cosson and Willis, 2012). Student feedback on this utility was also very positive (Cosson and Willis, 2012), whilst initial feedback from students at UH remains limited, it may be that subsequent feedback is very positive. Clearly there will be detailed analysis of student feedback regarding their learning experiences.

The two different simulation environments on offer here present different learning opportunities however it is the authors view that these opportunities are not being grasped fully. The theory of personal cognitivism-(Piaget, 1953)- revolves around accommodating and assimilating. At UH current provision of simulation perhaps limits the student's ability to do either. In terms of assimilating information, VR, whilst providing reproducibility, over the course of a 3-year course may teach the student how to 'pass the software' rather than developing new skills. Whilst the currently disorganised nature of simulation will not facilitate accommodation whilst there is on the spot or no debrief taking place.

Finally, there appears to be an opportunity for more interprofessional education taking place at UH when considered against the literature (Gilbert et al., 2010; Poore et al., 2014; Brown et al., 2016). Multiple studies have demonstrated its value in improving non-technical skills. There is a lack of physical space and as always, a limitation on time to facilitate these sessions, perhaps there needs to be a collaborative effort to address this across the school of health and social work. As an example, a future work could explore whether there is an opportunity to create a variety of short plenaries to help develop and consolidate non-technical skills, the learning of which does not end once an undergraduate programme is completed.

Conclusions and recommendations

This article has clearly shown that Simulation has an increasingly vital role to support large cohorts within confines of time and other resource pressures. By considering the successful concepts introduced in other institutions and in other professions UH can improve accessibility and quality of learning for students. This includes giving more consideration to each stage of the simulation, considering the number of variables the students face, a scaffolded approach to teaching. Recreation of the more complex and dramatic events should be reserved for only those students at level 5 and 6.

Recommendations from this paper are:

1) The variety and complexity of simulation is reconsidered, perhaps by a simulation committee, headed by the current simulation lead who can develop and introduce more realistic scenarios to students, building both technical and non-technical skills whilst stimulating engagement.
2) Simulation sessions follow a uniform structure, including opportunity for observer engagement. This should include the introduction of observer tools and dedicated time for a proper debrief to take place, from both those facilitating the session and peers.
3) The utility of learning scaffolding is widely introduced for simulation-based activity. The literature clearly supports an incremental approach, which will also help develop non-technical skills.
4) The School of Health and Social work collaboratively to research the current provision and development of extensive interprofessional education to support non-technical skills development as part of the wider curriculum.
5) VR activities remain supervised and other programmes are trialled to establish whether there is a more robust debrief option available. In the interim student feedback on the current provision should be made more frequent.

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A study exploring approaches for enhancing deeper learning on international field trips in Human Geography and Planning.

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Abstract:

The field trip is a well-established component of Human Geography and Planning curriculum in Higher education (Rynne, 1998), and seen by many to be both an essential and enjoyable learning method (Kent, 1997; Fuller et al., 2003). The role that these visits can play in skills development and the building of group identity, team spirit and good staff–student relationships should also be considered (Clark, 1996), however assumptions of the overall effectiveness of field trips remain. "Deeper learning" refers to the combination of a deeper understanding of core academic content, the ability to apply that understanding to novel problems and situations. This article explores the approaches to enhancing deeper learning on residential field trips through the design of preparatory resources and activities in relation to an international field trip embedded within a Level 7 module. A critical review of pedagogic strategies specifically intended to foster student attainment and engagement on field trips was undertaken, focussing on pedagogic interventions which could be applied to a residential field trip for home and international students studying Sustainable Planning. Through the literature review several key themes were identified which highlight the changing approaches have occurred in recent years with a distinct shift from passive to active learning techniques on field trips and the importance of identifying atypical considerations such as emotional geographies, the 'place' in which learning takes place and importance of preparation to ensure effective learning can take place.

Aim and principle:

The aim of this study is to explore the effectiveness and value of field trips in more detail, to question and examine to what extent they help to engender a deeper learning experience. The study comprises a Literature Review examining theoretical approaches to experiential and deeper learning and a review of specific strategies used at various stages of the experiential learning development process. It also considers preparatory methods in the organisation and design of residential field trips and identifies areas of positive contribution and disruption. Findings from this study will offer useful insights to support the approach and design of future residential field trips for an existing residential field trip for postgraduate Planning students and in the development of a new international field trip which will be open to level 5 and level 7 students within Human Geography and Transport Planning, respectively.

Introduction

Bland (1996, p. 165) once stated that "Geography without fieldwork is like science without experiments" suggesting that the perception of geography outside the immediate subject area is that field trips and fieldwork are inextricably connected. Within Higher Education establishments in the UK fieldwork and residential-field trips comprise a key part of national subject 'benchmark statements' for Geography and Planning (QAA, 2014; RTPI, 2014; RTPI, 2015).

An international field trip can be best defined as a delivery mechanism providing students with experiential learning opportunities to enhance their learning in the classroom. Edwards (2009) suggested this approach is therefore an 'optimal' model for positive learning outcomes, building on existing knowledge through observation, experimental research or place-based problem-based learning (see: Lonergan & Andreson, 1988; Fuller et al., 2006; Houser et al., 2011). Most of all students have the opportunity to experience 'real world' issues (Stoddart & Adams, 2004) and when conducted in an international setting it benefits students' resilience to global market forces, cultural awareness and transferrable skills.

Gerber stated in 2000 (p. 197) that "fieldwork as one of life's experiences should not be underestimated". The importance for students' skills acquisition has grown dramatically in Higher Education in recent years, with the increasing marketisation of higher education and shifting of focus on transferrable and graduate attributes (QAA, 2014). It's therefore important to consider the role field trips might play in the acquisition and development of these skills. In the case of the author, the introduction of reflective journals in a level 7 field trip was specifically included to help link skills enhancement with benchmarking standards and expectations of RTPI (2014).

The Royal Town Planning Institute's guidance specifically requires that the accredited courses should include a 'comparison with other countries e.g., the UK and EU spatial policy, planning and environmental policy and legislation' as part of its core knowledge components (RTPI, 2014). There is a distinct value for students that take part in residential visits and use experiential-learning techniques to understand and reflect on different planning systems, organisations and processes. This example of cross-national learning technique has been explored by several researchers from both the student (Datta, 2014) and lecturer (Pence & Macgilliivray, 2008) perspectives to challenge inherent assumptions of their subject area and practices.

The field trip has featured as a staple component of Geography and planning education in Higher Education for over 100 years and there have been numerous studies demonstrating the effectiveness, importance and value of the field trip (Rynne, 1998; Fuller et al., 2006; Butler, 2008; Datta, 2014) but this is largely skewed to physical geography and

environmental sciences education. Only recently have we seen a widening of research exploring the benefits of field trip to the Human Geography and planning fields despite there being almost universal acceptance (and assumption) that field trips should be integral to any University course curriculum (Yigitcanlar, 2013). Field trips come in various formats and at various levels of instruction. They often act as an add on to existing lecture-focussed modules or, in the case of this research project, can be an outright module offering a thorough and holistic interface between learning and teaching (Kent, Gilbertson, & Hunt, 1997)

Approaches to learning

Biggs (1987) identified three approaches to learning that consisted of a motivational and a strategic component that defined each approach (Table 1). These are framed as a surface, deep and achieving approach (later conceptualised as a strategic approach by Entwistle and Peterson (2004)). However, despite their conceptual accessibility, the notions of the three approaches to learning raises questions as to the causes of a learner adopting a particular approach, particularly as there is a limited number of studies that characterise learner approaches for particular disciplines within higher education (Healey & Jenkins, 2000).

Table 1: Approaches to learning, adapted from Biggs (1987) and Entwistle & Peterson (2004)

Approach	Motive	Strategy
Surface	Main aim is to gain a qualification with pass-only aspirations. Desire to avoid failure.	Learning targeted to bare essentials and reproduction of knowledge through rote learning
Deep	**A deep motive in studying to understanding ideas with personal interest in subject**	**Meaningful learning strategy through wide reading, inter-relating knowledge with previous knowledge and understanding**
Achieving/ Strategic	Based on competition and personal goals, often to obtain highest grade regardless of interest in subject	Strong organisation and time-management through adherence to guidance by instructors and alertness to assessment requirements

Students with a surface approach are motivated to cope with the course requirements and avoid failure with a strategy focussed on the minimum syllabus requirements and selective memorisation of information without necessarily seeking meaning or value. Students with an achieving or strategic approach are characterised by an applied and organised approach to study that is motivated by an intention to do well in the course and achieve personal

goals. In contrast to 'surface level', students with a deep approach are motivated by a personal and intrinsic interest in their studies and this is characterised by engagement with learning activities and a learning strategy that seeks meaning and understanding. This usually involves a student having a full understanding and awareness of the core academic content and the ability to apply that understanding to novel problems and situations. Deeper learning (knowledge and understanding) will be facilitated where fieldwork enhances student interest, enjoyment and recognition of importance (Kern & Carpenter, 1984, 1986).

"Deeper learning (knowledge and understanding) will be facilitated where fieldwork enhances student interest, enjoyment and recognition of importance" (Kern & Carpenter, 1986 p.181).

Fieldwork and the three domains of learning:

Whether deep or surface learning, it is important to consider these within the wider domains of learning. Table 2 outlines the various skills obtained within the three primary 'domains' which were developed by various pedagogic researchers in the 50s, 60s and 70s and all originating from Bloom's taxonomy (1954). The cognitive domain has since been through several major revisions with Bloom's taxonomy revisited (Anderson & Krathwohl, 2001).

Table 2: *Three principle learning domains. Adapted from the following: Cognitive (Bloom, 1954) Psychomotor (Dave, 1970) and Affective (Kratwohl et al,1964).*

Cognitive (Knowledge)	**Psychomotor** (Physical skills)	**Affective** (Attitude & emotion)
Evaluate	Naturalise	Characterise
Synthesis	Articulate	Organise
Analyse	Be precise	Value
Apply	Manipulate	Respond
Recall	Imitate	Receive

It's important to note that the learning process takes place within all three domains and therefore requires a consideration of whether the teaching, learning or assessment activities are aligned with learning outcomes of the activity or field trip as a whole. Considerable weight is often put on the cognitive activities as they involve the processing of information and deriving meaning from this while learning activities within the affective domain consider the attitudes, values and emotions and is seldom thought of as a learning outcome (see: Isen, 2003; Boyle et al., 2007).

As outlined within Figure 1, there is a clear distinction between all three domains, and it is important to note that all three spheres cannot be separated and depending on the teaching activity they can often complement each-other (Boyle et al., 2007). For example, where specific learning activities like lectures are likely to focus on cognitive development, more practical activities would focus more on cognitive and psychomotor skills.

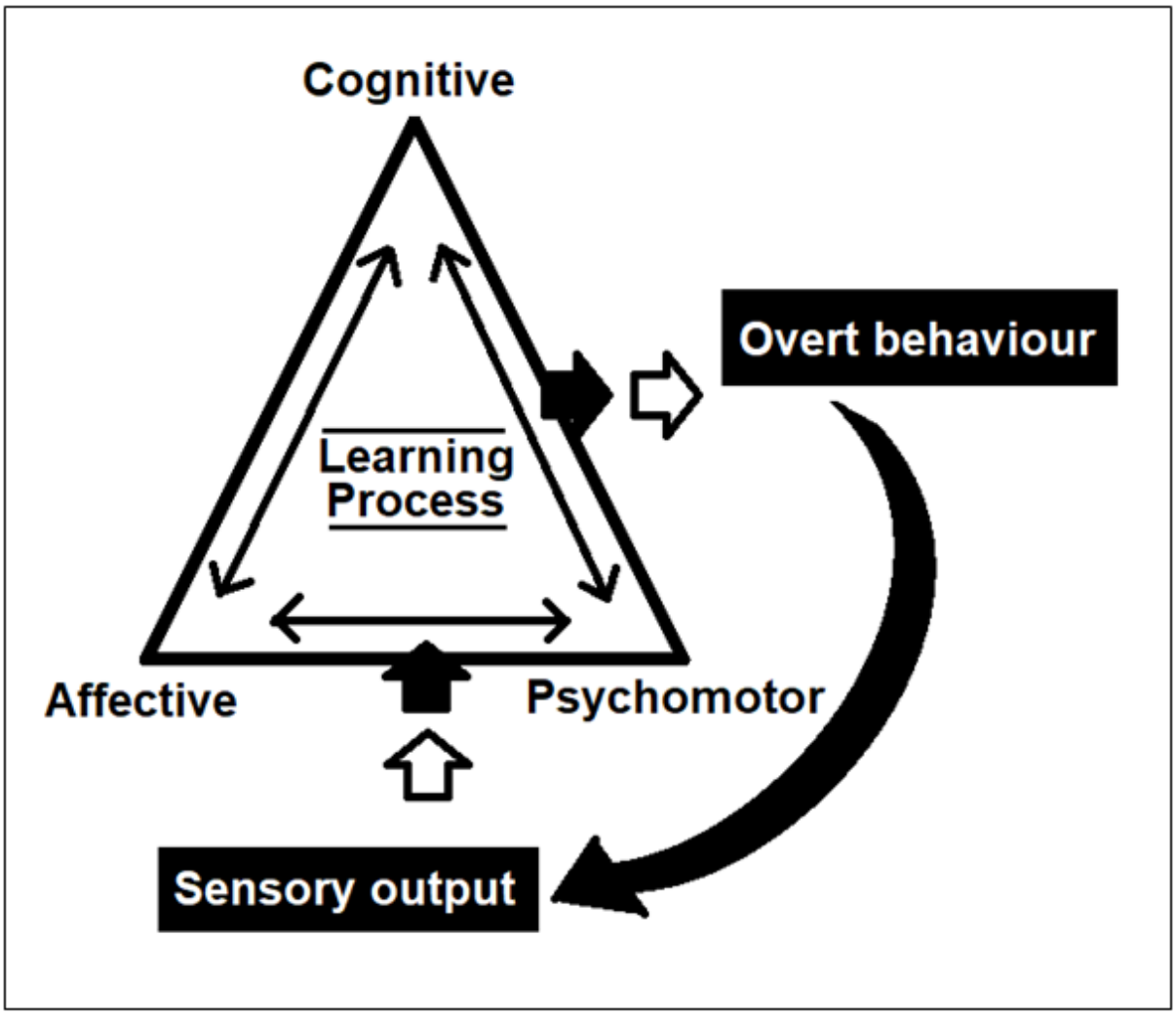

Figure 1: Three learning domains and the learning process (adapted from Eiss & Harbeck, 1969).

There is increasing evidence which suggests that domains of cognition and affect are much more connected than once thought, and that both positive and negative affective aspects such as willingness, motivation, social barriers and insecurity help to strengthen the cognitive processes that take place (see Gray, 2004; Storbeck & Clore, 2007; Pessoa, 2008). The notion of 'novelty space', first outlined by Orion and Hofstein (1994), suggests that students pass through various learning stages which help reduce their anxieties and concerns (i.e. novelty space) which acts as a negative and distracting factor within the geographical, psychological and cognitive domains. The relationship between novelty space and learning is therefore one that can't be ignored and reducing students' uncertainty and

unfamiliarity is of upmost importance to ensure they are able to maximise learning while on the field trip.

Taking students outside of the classroom can also help with students' motivation and willingness to learn. A higher level of sensory stimulation helps for a more memorable learning experience which positively impacts on recollection and the application of concepts. Chawla's (1994) study into how students perceive and experience the field in which they learn highlights the positive experience for both participants (students) and planners (staff) in developing meaningful and memorable experiences and the role of engaging multiple senses in the affective dimension.

Role of place in field trips:

Similar to the influence that a classroom might have on the effectiveness and value of learning within a typical lecture environment, the learning environment of a field trip is of significance as it is the 'place' in which the learning takes place. Cresswell (2004) stated that place is not just a thing in the world but a way of understanding the world, it is a way of understanding the way in which people and their environment interact with each other. In the case of field trips, the setting provides a unique interactive and social learning environment and these experiences help stimulate strong emotions linked to that specific environment. One of the distinct features of learning within the field is that students receive direct experience with the concrete phenomena and materials (Orion, 1993).

This 'situated learning' that takes place also helps a deeper understanding of issues and ideas than if presented 'artificially' within a classroom setting (Goodwin, 1994). The understanding that places themselves generate emotional reactions is important when considering how students may prepare for and reflect on their experiences within the field. It is also important to consider the role that 'psychogeography' can play in shaping students' experiences and learning on field trips. Psychogeography explores the emotional impact of places and the way in which this may influence learning that takes place (Haigh, 2008), for example for many, the international field trip may be the first significant time abroad which places students in an unfamiliar situation with varying sensory and emotional disruption (Simm & Marvell, 2015).

Preparation and design:

Reflecting on the above and considering the design and planning of field trips there are evident opportunities to build-in strategies and activities to help ensure effective learning can take place. Some of these considerations are explored herewith:

A structured knowledge base is one way in which deep learning can take place (Biggs, 1989). Therefore, careful consideration should be taken when designing teaching and learning activities within a field trip. The importance of students' preparation cannot be understated when designing field trips. For one, it can significantly help to reduce the novelty space which is usually experienced at the beginning of field trips. It is also important to consider the role and importance of preparation for staff in order to ensure suitability and effective deliverability of field trips (Rebar, 2012). Indeed, there are a limited number of educational programs preparing staff for field trips, and a limited field trip pedagogy to support preparation. Opportunities may lie in cross curricular learning and considering ways of drawing out best practice in field trip design by decoding the disciplines between subjects e.g. Environmental Sciences, Tourism and History (see: Middendoft & Pace, 2004; King, 2009).

In the case of the international field trip a series of briefing sessions could be arranged which can help students prepare academically and emotionally for various aspects of the trip. Activities like pre-activity assignments, itinerary briefings, slide shows and virtual previews of environments (e.g. via street view) can help to reduce the novelty space and thus provide positive effects on the cohorts learning outcomes.

It is also important to consider the role that unplanned activities can play in influencing students experience and learning on field trips. Non-formal learning through activities like evening discussions and reflective discussion. Observation from studies showing that fieldwork provides opportunity for learning to be reinforced during 'evening conversation' and in less formal lecturer–student and student–student interactions

Proposal – matrix for considering/critiquing deeper learning opportunities on field trips:

Below is a list of typical activities which take place on field trips within the subject area:

1. **Activity A - Initial visit to site location** - On a previous field trip there was an opportunity for staff and students to visit a study site the day before the main appraisal activity took place, helping with students' familiarisation and allowing those particularly keen to undertake further preparatory research.
2. **Activity B - Series of perspective/sensory experiences**. Students were presented with a series of urban data collection techniques which record senses subconsciously experienced in the urban landscape – this could be undertaken individually and independently following the field trip and applied elsewhere.
3. **Activity C – Informal discussions** during evening conversations following day's activities.
4. **Activity D** – Group preparatory exercise identifying and **evaluating overall aims and objectives**

5. **Activity E - Co-constructed session**. A current placement student was invited to speak to existing students as part of a one-day field trip, the session was co-designed by the student and staff member ensuring content and learning was aligned to overall module learning outcomes (see Cox-Petersen & Pfaffinger, 1998)
6. **Activity F – Reflective peer group learning exercise** – previous students were asked to reflect on their experience of an activity and current students were subsequently asked to discuss this with their peers (see Outhred & Chester, 2010).

As an initial task the above activities have been 'mapped' onto an overlaid model of Krathwohl's taxonomy model and Kohl's experience learning cycle.

Table 3: Adapted model based on Krathwohl's taxonomy model (1964), Kohl's experience learning cycle (1984)

		Field trip stage (adapted from Kohl 1984)			
		Experimentation	Experience	Reflection	Conceptualisation
		1. Pre-field trip	2. During Lecturer-led	3. During Student/Peer-led	4. Independent exploration
Krathwohl's taxonomy (1964).	A. Receiving	B	A	C	
	B. Responding				B
	C. Valuing	D		C, E	
	D. Organisation	F, D		F	
	E. Characterisation		E		

The above model, although rudimentary, assists in the placement of specific teaching and learning activities at the various stages of learning that takes place over an afternoon, day or week. It maps out potential teaching and learning activities for students and allows for a systematic review and reflection of field trips:

- It will be assessed alongside learning outcomes - to ensure appropriate alignment),
- Considered alongside student assessment and feedback – to measure the level of student's knowledge and understanding
- Compared with activity-based feedback and satisfaction surveys - to ascertain the level of student enjoyment.

Wider implications:

The findings of this study clearly show the that field trips provide an effective and useful learning experience for students and that many of the impacts are not yet fully understood

and realised. There are many opportunities for field trip learning to positively impact the affective domain; improving students' graduate attributes notably their abilities with problem-solving activities, value of team-working and societal/global awareness. The 'situated learning' that takes place helps apply existing acquired knowledge and supports students' feelings of being part of a wider community of learners which further impacts confidence in academic abilities and overall cohesion. However, when considering the above within the context of the affective learning domain, it is clear to see inputs and outputs but can often be tricky to establish exactly where the various learning processes take place.

Several significant questions remain when considering the overall aim of this study which provide some useful context for further investigation and implications:

- How can and should the impacts of specific pedagogic teaching approaches be measured within the context of a field trip?

- How can educators address assumptions of the effectiveness of fieldwork activities providing deeper learning opportunities, particularly in considering (and excluding) the 'embodied' feel-good value field trips provide - i.e. it is undisputedly enjoyable but is it completely effective?

- What role does 'place' itself play in the shaping of students' acquisition of knowledge and the level of acquisition.

- How can learning best practice be shared and communicated within other subject areas and at various levels of instruction?

It is not uncommon for students to experience feelings of anxiety, loneliness and confusion when on international field trips which can also impact on the learning that takes place. There were very few studies exploring this aspect of 'cultural shock', representing an area in need of significant attention, and perhaps a consideration of the five stages of culture shock within the context of international field trips and exploration of strategies to minimise negative impacts.

Conclusion:

Indeed, this study is only intended to be cursory in its application and outcomes but it does present considerable scope for further investigation of the learning and teaching practices best suited to engendering a deeper understanding in addition to further insights into the changes in approaches to learning over time and their causes.

Multiple studies have found that fieldwork alone provide students with a more enriched learning experience that traditional, classroom-based activities. Combining this with a variety of learning activities at all stages of the field trip (from planning to reviewing) offers students shallow, deep and strategic learning opportunities and ensures this pedagogic approach takes place in structured, multi-stranded and enriching educational environments.

Significantly, students also learn how to apply the information and observations they obtain on field trips into their own knowledge and understandings and in doing-so the fieldwork profoundly changes the students themselves.

It is evident that a fuller understanding and appreciation for how this transformation takes place is immensely valuable to those working within these pedagogies and continues to inspire and motivate me to investigate further as I continue to develop my role as an educator within higher education.

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Decoding the rubric for dissertation writing: a pilot workshop

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Abstract

Discussion of exemplars of student work is a productive means of explaining tacit knowledge and guiding students into the requirements of academic writing. Through a pilot workshop on dissertation writing, this study examines how exemplars marking can be used to better understand grading criteria and of quality; and to promote positive transfer of skills from exemplars to assessment task.

A student-led workshop involved student group analysis and annotation of a series of example extracts showing a range of good examples and common mistakes from different sections of a scientific dissertation. For each section of the report the students were shown the assessment criteria and asked to mark it and additionally to explicitate the marking criteria by rephrasing them as a list of do's and don'ts.

Student perception of the usefulness of the workshop was positive and was reflected in improved assessment outcomes. Teaching implications of these results are discussed, and some avenues for future workshop applications are outlined.

Keywords:
Exemplars, exemplars; quality; deconstructing; peer discussion; teacher guidance

Introduction

A writing crisis?

The recent expansion of ''writing intensive'' courses across a wide range of disciplines, including and not limited to the STEM disciplines (Science, Technology, Engineering, Mathematics), has led to discussions regarding how the benefits and the mechanisms of writing within the disciplines encourages learning, socialization and radically changes student's attitude towards the discipline (Carter, Ferzli, and Wiebe 2007). However, many students do not have a wide experience in writing lab reports in a professional, "publishable" style. On the other hand, it is not uncommon to hear undergraduate instructors lament over the weak writing skills of many of their students, and the concept of a "Writing crisis" has been circulating for many years, often perpetuating a long-standing

'moral panic' about the poor quality of students' academic writing (French 2013; Kim et al. 2009).

Some solutions outlining design implications of a dialogic approach to student writing pedagogy have been highlighted as calling for dialogue to be at the centre of an academic literacies stance (Lillis 2003). The more the subject lecturer is involved in this integrated writing instruction, the better are the opportunities to elicit student perspectives, consider 'the resources that writers bring to the academy'(Lillis and Scott 2015). Fernsten and Reda, support the idea that writer self-awareness provides students with a better understanding of the writing process, additional tools with which to attempt writing assignments, and greater confidence to move through the multiple literacy tasks of the academy and beyond. By inviting students to examine their beliefs about writing, these activities are useful in any classroom and across disciplines (Fernsten and Reda 2011).

Decoding the rubric

One tool which is available for the students to consider their beliefs about writing and for decoding the discipline is the use of rubrics. Educators tend to define the word 'rubric' in slightly different ways. A commonly used definition is a document that articulates the expectations for an assignment by listing the criteria or what counts and describing levels of quality from outstanding to poor.

The number of studies in this field is limited, and the results are of complex interpretation. On one hand, some studies (Greenberg 2015; Petkov and Petkova 2006; Reitmeier, Svendsen, and Vrchota 2006) suggest that including students in the development and use of rubrics or sharing the rubric prior to an assignment was associated with improved assessment outcomes, while other studies have shown no differences between students' marks with and without rubrics (Green and Bowser 2006). This would appear to suggest that simply circulating a rubric to the students cannot be expected to have significant impact on student work and perception - students must actively make use of a rubric (e.g. in assessments or revision) in order to gain benefits.

However, if students do not understand the rubric terminology and cannot differentiate between academic standards, rubrics have little value for either preparation or feedback. Such 'barriers to learning' can be particularly significant for students from unusual backgrounds as students, at all levels, do not necessarily 'know what to do' in response to conventional assessment tasks, essay criteria, or instructions about styles of referencing. Many of the problems experienced by learners are at least partly being caused by the cultural values and assumptions which underpin different aspects of pedagogy and assessment. In particular, "Problems in decoding and responding to expectations appear to be particularly acute in relation to assessment criteria " (Haggis 2006) and terms such as 'critical analysis' are often unclear to students and need further explanation (Reddy and

Andrade 2010). Haggis 2006 also makes a cogent argument against the risks of considering these findings as an reason for 'dumbing down' or as an indication of the erosion of standards – it highlights instead the need to shift the framing of the 'problem' from a static, condition-based view of the individual learner ('what is wrong with this student') towards a dynamic, process-based view which tries to identify problematic aspects of higher education discourse and practice (what elements of the curriculum are preventing some students from being able to access this subject?') (Haggis 2006).

An example of such an approach is represented by the work undertaken as part of the WhatWorks? Student retention and success change programme which was recently implemented at the University of Wolverhampton. The initiative focused on implementing and evaluating an inclusive assessment intervention, which included a student led assignment unpacking session where students discussed in groups their understanding of the assignment requirements and fed them back to the group and the lecturer (Debra Cureton 2012). The initiative saw the students as active parts and co-creators in the further development of the inclusive assessment curricula, empowering them and resulting in improved attainment and confidence (Curran 2017; Debra Cureton 2012).

The support of exemplars

While the rubric can improve students attainment by clarifying the outcomes, it relies on the assumption that the description of such outcomes is clear and unequivocal, giving the 'tools of the trade' for granted (Lillis and Scott 2015). Students often find it difficult to understand assessment criteria and the nature of good quality work in their discipline. Under these circumstances, they face challenges in identifying and providing what teachers are looking for in an assessment task (Sadler 1987).

Royce Sadler has been a remarkably influential promoter of the value of using exemplars, and he defined exemplars as key examples chosen so as to be typical of designated levels of quality or competence (Sadler 1989, 2002). Exemplars are therefore given examples of best or worst practice which are designed to assist students to increase their understanding of competences, content or knowledge and to explicate established criteria and standards (Greenberg 2015). In contrast with model answers – which are single "perfect" answers – exemplars often show a grade range and can indicate how the exemplar satisfies the stated criteria for assessment or they may simply be presented as they were submitted for assessment by the former student (Huxham 2007; Newlyn 2013).

Handley and Williams have observed that exemplars can be effective tools in increasing students' engagement with feedback (Handley and Williams 2011). In addition, Scoles, Huxham, and McArthur al observed that students showed great support for the use of exemplars. They identified exemplars as a practical tool that students can access to help close the gap between feedback and exams, as it allows students to take control of the

feedback process, and increasing exam marks (Scoles, Huxham, and McArthur 2013). They state that the exemplars helped “understand what was wanted from their lecturers”, especially “ in conjunction with conversations with lecturers” (Scoles, Huxham, and McArthur 2013, p. 6-7).

Issues of time and consent are very important considerations in the argument against the use of exemplars, as well as the idea that providing exemplars 'gives students the answer' and may lead to plagiarism (Newlyn 2013; Newlyn and Spencer 2009). Such issues need to be considered and could potentially be addressed by making the exemplar as generic as possible, therefore ensuring that the exemplar could be multiple cohorts.

An interesting example of intervention which merged the benefits of using exemplars with the benefits of rubrics has been reported by Jones et al. Their intervention comprised of (1) deconstruction of the rubric and standardising the marking method; (2) examples and exemplars; (3) peer review; (4) self-review; and (5) a reflective diary; and resulted in improved marks and students confidence (Jones et al. 2017).

A specific UH perspective

The BSc in Pharmaceutical Sciences at the University of Hertfordshire programme was designed with extensive input from external stakeholders from pharmaceutical and biotechnology companies to meet the needs of the ever-evolving pharma industry in the UK and worldwide, to produce graduates who are able to contribute to research, discovery, development and production in the pharmaceutical industry and related areas (LMS 2019). To “communicate effectively both orally and in written form” is included among the intended learning outcomes for the programme and is supported through exercises on report writing, feedback on written assignments personal academic tutors and seminars at level 6 (LMS 2019, p.5). However, in line with the larger higher education context, students appear to struggle in writing extended reports in an academic style and this can lead to negative perceptions of the student writer identity and anxiety, in particular for students from varied backgrounds (Fernsten and Reda 2011). At Level 6 the BSc in Pharmaceutical Sciences includes two written assignments for which the assessment criteria are available, but often misunderstood es exemplified by the questions received in relation to the assignment as “How much detail the critical analysis should be?”, “I just wanted to ask how much detail and information do we need to include”.

This study focuses on the preliminary evaluation of a workshop designed to offer these students a chance to bridge this lack of clarity for them to achieve the learning outcomes more easily and perform better.

Methods

A student led workshop was piloted as part of the Advances in Pharmaceutical Formulations and Drug Delivery (APFDD) optional level 6 module (n= 15 students). The module assessment includes a written report on lab-based activities which accounts for 30% of the final module mark.

The workshop was designed as a tool to clarify the assessment criteria by analysing and discussing as a group and annotating a series of example extracts showing a range of good examples and common mistakes from different sections of a scientific dissertation. The exemplars were based on published research papers, amended to include frequent variations and mistakes frequently observed by the author in previous year's marking. The workshop was delivered in 1.5 hours, students were provided the exemplars as printed version to annotate. For each section of the report the students were shown the assessment criteria and asked to annotate the exemplar (Figure 1 and Figure 2) and to additionally explicitate the marking criteria by rephrasing them as a list of do's and don'ts. Each group compiled a list in real time on post-it notes and then handed it to the teacher who transcribed the criteria onto the slides (Figure 3). The updated slides were subsequently circulated to the students to be used as a support during the write-up.

Immediate evaluation was performed using Brookfield's critical incident questionnaire ("What was the most engaged/disengaged moment?", "What was the most confusing moment?", "what was the most useful moment?") and collecting anonymous feedback on post-it on a voluntary basis. Delayed evaluation was based on comparing responses to mid-module feedback questionnaire and written assignment marks of the cohort that was administered the workshop with the previous year cohort that was not administered the workshop (2018/19, n=15; 2017/18, n=16). Welch t test was performed given the different sample size.

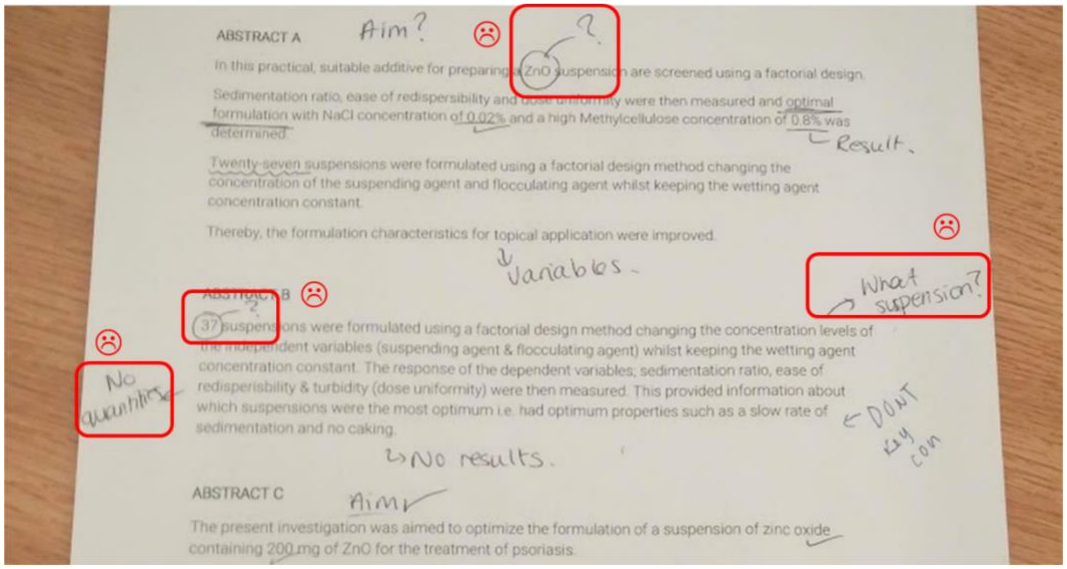

Figure 1. Example of annotated exemplar (1)

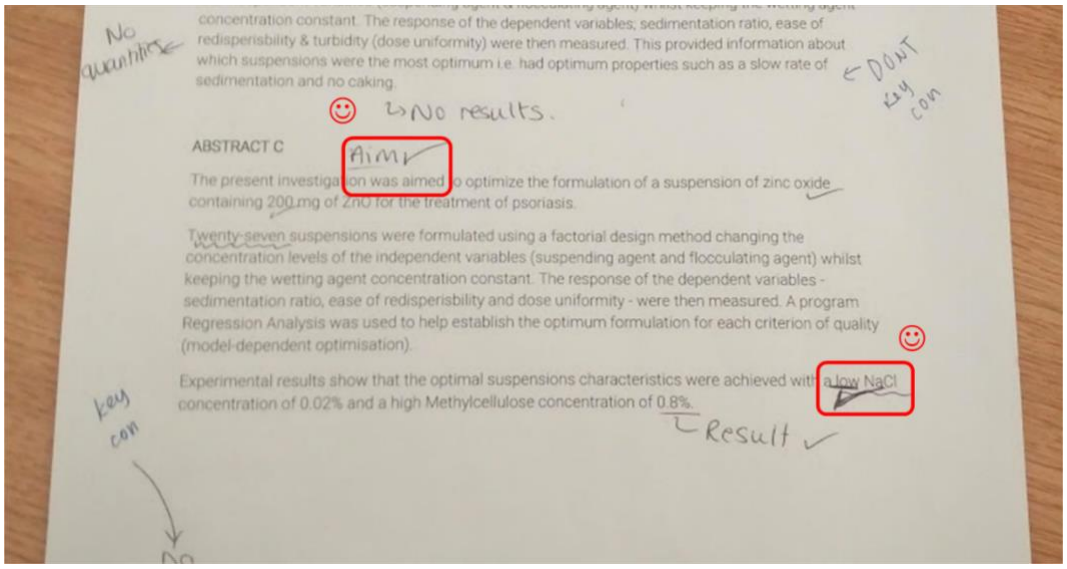

Figure 2. Example of annotated exemplar (2)

Abstract (10%)	Professional standard in terms of quality and comprehensiveness. Cites key conclusions. Contextualises the work effectively and succinctly.

Key features:

☺
- Include values
- What is the formulation for?
- Key conclusions (clear structure: context/methods/results)
- Explain formulation used
- How were properties improved?

☹
- Don't have continuous paragraph
- No bullet points

Figure 3. Example of "translated" assessment criteria

Results and discussion

Brookfield's critical incident questionnaire has been reported to be a beneficial instrument for educators to assess their own teaching, make adjustments to class delivery based on student feedback to engender greater student engagement, and encourage future teachers to engage in the process of self-reflection (Jacobs 2015). A simplified version of the questionnaire was answered by 8 in 15 participants (53%) and results are represented through a word cloud in Figure 4. The immediate feedback was overwhelmingly positive in terms of perceived usefulness and (e.g. "engaged throughout the workshop", "would have been useful before dissertation"), no elements of confusion were identified and the only criticism concerned the general character of the workshop (not very specific to lab report, to

reports in general", "should be more specific to the actual assessment"). The latter is not unexpected as the exemplars were purposely designed as generic in order not to provide a report "template" and to be potentially administrable to multiple cohorts (Newlyn 2013; Newlyn and Spencer 2009).

The good perception of the intervention also found a correspondence in the improved assessment outcomes as shown in Figure 5, and the introduction of the workshop corresponded to a 12% increase in the written assignment marks. Such increase was observed across the coursework written assignments average marks (written assignment: 12% increase, lab report: 28 % increase) but not in end of module examination which on the contrary showed a 7.5% decrease in final marks. This suggests that the increased coursework marks cannot be explained by an overall higher academic strength of the cohort and appear instead to be produced by the effectiveness of the workshop.

A last point of investigation was the effect of the workshop on students understanding of the assessment processes, and on module structure and learning outcomes. While there was no direct metric available to measure this, the mid-module feedback for APFDD shows an increase in understanding of the assessment, and of the module structure and learning outcomes (Table 1). This is however an indirect measure and suffers of two main limitations: it is a global evaluation of the module, and not of the single assessments, and of the reduced number of participants (2017/18: n=10; 2018/19: n=7). This calls for further investigation, however it does not disprove a positive effect of the workshop introduction.

Figure 4. Word cloud summarising the answers to critical incidence questions for immediate feedback assessment

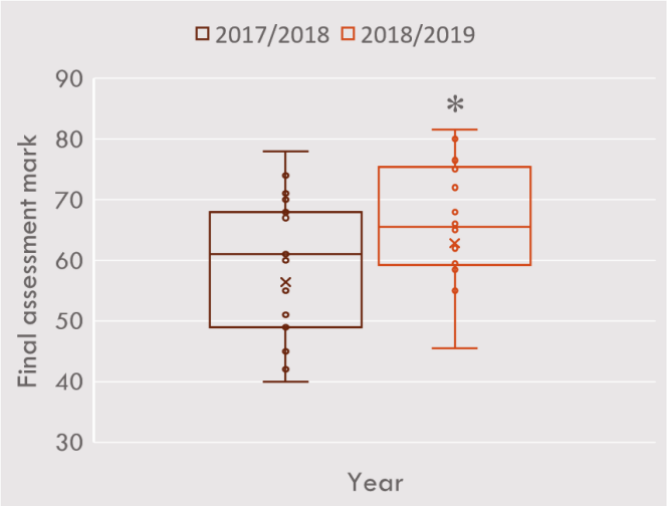

Figure 5. Written assignment results before and after workshop trial (* indicates p<0.05)

	2017/18 (n=10)	2018/19 (n=7)
At this stage in the module I understand how my learning will be assessed on this module	4.6/5	4.7/5
At this stage in the module I understand the structure and learning outcomes of the module	4.5/5	4.7/5

Table 1. Average responses to mid-module feedback questionnaire before and after workshop trial

Conclusions & future developments

This study focused on the preliminary evaluation of a workshop designed to bridge the gap between defined criteria (the rubric) and standards to help students to achieve the learning outcomes more easily and perform better. The positive outcomes, namely the students' positive response to the introduction of the workshop and the increase in student marks, suggests that this workshop represent a promising strategy to achieve such aims, probably due to the active role of the students in "decoding" the rubric – in line with the previous research (Curran 2017; Debra Cureton 2012; Green and Bowser 2006; Jones et al. 2017).

It has to be noted that another advantage of the intervention is that it is versatile and time effective, and could be easily integrated in most higher education courses – in contrast to other studies which contemplate 11-weeks interventions (Jones et al. 2017). The main limitations are represented by the small number of participants, which makes it difficult to draw final conclusions, and by the reduced reflection element in this work. Cultivating reflective and critical practice with rubrics has been reported to support the development of engaged, self-regulated learners capable of applying their knowledge and appropriate skills

to new tasks and the incorporation of a reflective journal should be considered for future embodiments of the workshop (Bryan and Clegg 2006; Race 2007).

Future work will focus on continuous monitoring of the workshop within the APFDD module, and potentially on the exploration of widening its application to larger cohorts of adjacent disciplines, for example level 6-7 of the Master of Pharmacy course. In addition, since the rubric is an integral and routine component of assessment, and the goal of educators is to enhance academic performance, it is in the student interest to support their understanding of how to effectively utilise a rubric early in their university career – therefore it could be imagined to pilot similar interventions across the whole duration of their course and not just in their final year.

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Understanding the challenges in Pre-registration Nursing for students with English as a second language

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Abstract

Nursing students who speak English as a second language (ESL) face additional challenges when studying and working in clinical environments. With the diversification of the nursing workforce within the United Kingdom, it is vital to research and understand the experiences of students with ESL. A multitude of factors including background, culture, commuting, maturity and ESL can often mean that the students, who are often from a Black Asian Minority Ethnic (BAME) background, may underperform in Higher Education which can contribute to a lower degree grade. This article aims to review the current literature around students with ESL and form an understanding of the challenge's ESL students face. Relevant literature will be explored in relation to the current evidence of ESL impacting progress in nursing degree courses and will explore ideas for strategies to increase the opportunities to attain higher awarding grades. From understanding the challenges, brief recommendations will be made in relation to developing a strategy within a Pre-registration Learning Disability nursing course which has a high percentage of BAME Students with ESL and low awarding grades.

Introduction and Context

The nursing workforce worldwide is becoming increasingly diverse and expansive with staff who have English as a second language (ESL) (Crawford and Candlin, 2013, Salamonson and Andrew, 2005) and who may be from diverse cultures and BAME backgrounds. It is vital that British Higher Education Institutions (HEI's) and health organisations recognise this diversity and start to consider the journey of the ESL and BAME students to become a competent nursing practitioner who is fluent in understanding and communicating in English to provide high quality patient care (Watson, 2006).

The BAME attainment gap is a complex issue that has been acknowledged as a significant current concern by British Higher Education Institutions (HEI's) and there is a long way to go before ethnic equality and diversity is fully achieved (Runnymede Trust, 2015). A recurrent theme in the research, literature and official policy documents is that the attainment gap can be difficult to isolate and that BAME students are less likely to obtain "good degrees" (Higher Education Funding Council for England, 2014; Richardson, 2008). Additionally,

research has indicated that one of the many factors that influence the attainment gap is that some university structures can be susceptible to racial bias which includes admission processes, the curricula, and non-anonymous course assessments (Stevenson, 2012). At the University of Hertfordshire (UH) the pre-registration learning disability nursing degree programme has a significant BAME student population of over 74% (National Student Survey (NSS), 2017) which is a higher number of BAME and potential ESL students than the alternative branches of nursing in adult (64%), child (36%) and mental health (55%) cohorts (NSS, 2017). It is also evident from the NSS (2017) results and awarding grade data that there continues to be a significant awarding gap in the LD programme where only 11% of BAME students received a good award compared to a sector average of 32%.

The University of Hertfordshire School of Health and Social Work has recently launched a 5 step strategy to start addressing the BAME awarding gap which focuses on strong leadership and commitment to make changes; having conversations about race and changing culture; Developing racially diverse and inclusive environments; getting the evidence and analysing the data; and understanding and sharing what works (University of Hertfordshire, 2019) within the school. The strategy whilst positive, is only a start to research improving BAME students' experiences and does not clearly discuss or explore students that have ESL who may struggle in academia. The NSS results (2017) also shows that the students find assessments difficult and their responses sit below the national expectation which indicates there is further exploration required. These students also having English as a second language (ESL) can encounter large cultural and language barriers to successfully receiving a good awarding grade but also on registration with the Nursing and Midwifery Council (NMC) as a competent and culturally diverse nurse.

In order for the nursing students to register with the NMC it is made clear that the qualified nurse must 'be able to communicate clearly and effectively in English' and nursing students therefore need to perform and demonstrate culturally competent care with effective use of language that help build trust and rapport with patients during their nursing programme (NMC, 2018). With the diversification of the workforce, it is vital that HEI's start thinking about the BAME and ESL students' journey and barriers which impact on their awarding grade. Donnelly, McKiel and Hwang (2009) evidence that the number of student nurses with ESL are increasing in Higher Education and can further create the culturally diverse workforce which is required in the western medical culture. Whilst the exact number of students that have ESL in the UK pre-registration nursing programmes are not recorded, it is noted from discussions and reflections with students and staff that there is often a perception of barriers related to language skills. Language proficiency is often anecdotally raised as a concern and students with ESL backgrounds often have difficulty with technical and general aspects of English including confusion over terminology, how to construct assignments and confidence with examination writing (Gudhe, 2003; Brown 2001).

Furthermore, challenges with pronunciation, comprehending colloquial expressions, clear telephone communication and nursing can affect the assessment of competency in clinical placements jargon (Boughton et al. 2010). For a student with ESL these language challenges can also be compounded by difficulty of adapting to Western culture where they will often have less social support with feelings of loneliness; not understanding the teaching structure, and the stress from expectations to comprehend a second language (Crawford and Candlin, 2013). All these factors contribute to poorer academic performance and higher attrition rates compared to native English speakers and as a result these students may require additional support emotionally and academically.

Research within the United Kingdom regarding students with ESL is limited as this has not been a specific focus for universities. Therefore, this review focuses on understanding the challenges faced by the student with ESL and to make brief recommendations on how HEI's can start to explore the experiences of students with ESL and therefore start improvements to addressing the awarding gap that is currently present.

Literature Review

A literature search was conducted on databases Cinahl and Pubmed using the keywords English as second language; BAME; nursing education; education; degree attainment. Additional searches included culturally diverse; nursing students and nursing workforce. A total of 18 abstracts were read and a systematic review completed from which 7 articles were reviewed in depth. Most of the research articles found relate to the impact of students with ESL in clinical nursing environments rather than in the academia of nursing programmes although there is reference to the impact of teaching and lecture styles. Additionally, there is limited research available from the United Kingdom therefore the literature search was broadened to include studies from Australia, Italy and the USA which adopt similar strategies towards nursing education. In order to establish the core challenges for the ESL students through the literature review, core themes have been identified which include difficulties using academic English; challenges adjusting to language and cultures; academic programmes and approaches and personal experiences. These themes will be discussed within the literature result below.

Research by Cummings (1992, 2003) first explored the correlation between language development skills for students with ESL in schools and the impact on their success in education. Whilst the original research is based on school children and referrals to educational specialists for support in education, the results are significant to degree level students who have ESL as they are more likely be delayed in their language development in English from an early age thus affecting their development of academic language in adulthood. Cummings (1999) demonstrated that there is a clear correlation between the ESL

student's length of residence in a country where they are studying and the development of understanding and interpretation of the country's language from an academic level.

Cummings (2003) Model of Language proficiency shows that it takes a minimum of 2 years for ESL students to develop fluent conversational language skills from face to face contact which is termed Basic Interpersonal Communication Skills (BICS). Furthermore, it can take a further 5-10 years to develop Cognitive Academic Language Proficiency (CALP) which is the student's ability to understand and express more complicated concepts to guide them in developing new ideas, processes and meanings related to the academic setting (Cummings, 1999; Malu and Figlear, 1998). However, Scarcella (2003) articulates that BICS and CALP skills are not straightforward and can be learnt at differing points in learning and is not a useful framework to apply when considering the complexities of academic English for ESL students. Nevertheless, the framework is a useful took to start with as Cummings (1999) findings are similar to other research that suggest ESL students with poorer English language skills and lack of CALP are more likely to have a lower academic grade and increased levels of stress as they are disadvantaged in academic language before they begin studying (Salamonson et all, 2008; Boughton, Halliday and Brown, 2010; Malu and Figlear, 1998).

Similarly, Shakra and Horsfall's (2000) study into ESL Student experiences in their first-year study of nursing focused on the student's difficulty in achieving high level of English proficiency but also difficulties with speaking and comprehending health terminology and language within clinical situation to patients and in the classroom. The study used semi-structured interviews within the first 4 weeks of the ESL students' course. Although a small study, the findings indicate that these students preferred peer support networks and collaborative study time with reduced academic writing support during their studies. The students, who are recognised as courageous and determined to achieve, had multiple social, educational and clinical issues within their programmes to overcome. Shakra and Horsfall (2000) expressed the importance of further support systems available.

Research by Johnson (2008) in a New Zealand University supports the need for additional English support programmes following their retrospective interviews with the 9 ESL students and their lecturers across multiple Departments in Healthcare. Johnson suggests that approximately 20-30% of lecture content was not understood using traditional classroom approaches which places the ESL students at a disadvantage to learning effectively. It is therefore vital when designing lectures that alternative teaching and coaching approaches are considered for example 'flipped classrooms' where class time is used for students to master skills through technologies, collaborative projects and student peer support with guidance from lecturers.

Salamonson et al. (2008) further explored the concept of ESL students being at a disadvantage in academia thus having a lower awarding grade due to poor language skills.

Their research created a 5 item English Language Acculturation Scale (ELAS) to help measure English language development for first year ESL nursing students and academic achievement as a self-reporting tool for levels of English language. This study was critiqued as having a small student sample and only focused on ESL students. Therefore Salamonson et al. (2013) further researched the effectiveness of ELAS in a wider study of 1400 nursing students in nursing academia using a prospective correlational survey design alongside descriptive statistics and factor analysis. Additionally, the study also positively supported the theory that the length of time living in the country impacted on language development as the ELAS scores would be lower for those students who had less time to develop their English language. The study demonstrated that the ELAS is a reliable and valid tool and confirmed findings that ESL students with lower ELAS scores are also likely to have the lowest awarding grades which is consistent throughout other studies (Salamonson et al. 2008; Salamonson et al. 2019; Koch et al, 2015; Glew et al.2015). The core implications from both research pieces are for further support programmes to be put in place for students who have ESL and lower ELAS scores.

A transformational research piece by Boughton et all (2010) in Australia reviewed a support programme for student nurses who were from Culturally and linguistically diverse background (CALD). The study used semi-structured interviews to review 13 female students' journey in a support programme and findings suggest that the students' academic potential benefitted from support with essay writing, digital literacy, critical reading and referencing through ongoing sessions which instilled confidence in their skills. Critically, the findings identified that the ESL students felt less isolated and lonely as a result of group affiliation and thus cultural adjustment to their new country was easier to manage. This also meant the students did not withdraw from their nursing programme thus contributing to the diversifying of the nursing workforce.

Havery (2018) researched the impact of clinical supervisors and clinical environments that support learning opportunities for ESL nursing students in Australia. Through an ethnographic design of 21 students in their clinical placement environments, the research observed and analysed the students learning activities through space available on wards and movement of the ESL Nursing student within their clinical environments. Havery (2018) discovered that whilst having English as a second language is a major barrier in teaching in the classroom, within clinical wards and hospital environments there are numerous opportunities for students to improve their English language skills (CALP skills). These spaces included hallways, nurses' desks and at the patient's bedside. Supervisors demonstrated that having a pedagogical approach in the corridors, wards and 'action hotspots' (patient care opportunities) allows for 'ad hoc teaching' and facilitation for reflective practice (Gregory, Hopwood and Boud, 2016). Additionally, the ESL students can gain confidence and experience in the nursing terminology, debriefing their work, completing clinical skills and CALP language (Havery 2018).

However not all students will have successful access to this type of teaching approach as this depends on the skills of the supervisors to identify equal learning opportunities for all learnings using a pedagogical approach and the confidence of the student in the terminology and meaning (Havery, 2018). However, research also suggests that the supervisors in clinical placements do not always feel equipped to confidently support ESL students and may worry about discrimination towards the student and making decisions about underperformance by students (Miguel and Rogan, 2015). Additionally, Supervisors may feel they do not have the appropriate strategies to support students effectively with assessing an ESL's English Language abilities and therefore addressing language barriers for those ESL students to achieve highly in their placements (Jeong et al. 2011; Miguel and Rogan, 2015). However, this research supports a guided approach to using spaces and activities that can maximise students' opportunities for learning rather than focusing on a deficit model of the student with ESL (Havery, 2018).

Sanner and Wilson (2000) offer an alternative view from the ESL Students' experiences in a United States baccalaureate nursing study. This study focuses on how ESL students describe their own experiences through interviews based on their life histories and reconstruction and reflections of their experiences in the programmes. The students feedback related to negative learning experiences, incompatible teaching and learning styles and self-consciousness about their status as an ESL learning. It is evident that confidence and self-esteem were impacted when the students tried to reach standards set by their tutors which they then struggled to achieve. Conversely the students did not place the core concerns being related to just reading and comprehension as discrimination and stereotyping were also key to their experiences. Although this was a small study of 3 participants who originally lived outside of the United States of America, the probability of students experiencing similar situations in education is high which needs to be explored further in educational research (Sanner and Wilson, 2002).

A recent descriptive phenomenological research study in Italy explored the lived experience of nursing students from a Culturally and Linguistically Diverse (CALD) background (Randon et al, 2019). Randon et al. (2019) discovered that these students had a 'profound transformative experience' when moving to a new country to undertake a nursing programme. This occurred through three processes: profound attachment to own culture followed by immediate detachment and desire to belong in the new culture and thirdly integrating both cultures. The students recorded the extra academic challenges as being the extra time for learning processes and primarily found trying to balance positive and negative experiences of culture diversity a valuable learning opportunity to become a culturally diverse practitioner. The findings showed that integration of cultural sensitivity and consistency to learning process across academia and clinical placements can enhance the student's ability to achieve higher grades as well as confidence and self-esteem in nursing skills.

Discussion and Review of the Challenges faced by ESL Students

From the literature it is widely evidenced that assessing the English language communication and nursing skills of the ESL student is a complex process and that there is a significant research gap for recognising and supporting students with ESL. Crawford and Candlin's (2013) literature review findings show that the research into the challenges for ESL students is not comprehensive. The research highlights the value in the nursing workforce in increasingly diversifying and nurses with ESL backgrounds are increasingly valuable in providing care, but they are facing complex challenges to achieve highly in their academic programmes and communicate effectively whilst in practice (Crawford and Candlin, 2013; Boughton, 2010; Havery, 2018; Sanner, Wilson and Samson, 2002). Although HEI's are starting to address the BAME students' experiences (UH, 2019) there is little focus on the impact of English as a second language when starting and completing pre-registration programmes. Research that is available focuses on the deficits of the student's abilities, the tools used to identify Students with ESL capabilities and the impact on clinical placements. However, there is less research on successful strategies that have been implemented to support ESL students through their journey. Within the Learning Disability Pre-registration course, it is vital to start researching the ESL students' experiences and support within the University of Hertfordshire.

Recommendations from the research that could start the support for ESL students are identified as:

- Using English Language Diagnostic tools at the beginning of an ESL students nursing course.

- Providing opportunities for English Support Programmes to develop both the BIL and CALP language proficiencies within the courses and as part of cider community networks at the university.

- Reviewing teaching styles and approaches to learning both in the classroom and clinical placements to enable growth in understanding and application of knowledge and skills. Opportunities such as peer reviews for teaching staff, regular updates through training and role modelling of good practice within both environments could be considered.

- Continued recognition and implementation of strategies to improve widening participation for ESL and BAME students which improve their awarding grade.

The literature has demonstrated that English language diagnostic tools such as the ELAS can have a successful role in support ESL Students within Australia's education system

(Salamonson et al, 2008). Due to the success of the tools discussed (Salamonson et al, 2008), it could benefit all students to have a baseline tool completed at the start of their programmes as the tools may help identify any additional language support required from any nursing student. However, these types of diagnostic tools are not commonly used in the United Kingdom and consideration should also be given to how a course can provide additional support to students if the results indicate they have lower English language skills.

Research has shown that ESL student can have difficulties in balancing different culture expectations and difficulties in navigation of language. It is vital to recognise that ESL students can struggle to express themselves when they must translate their ideas and nursing concepts into English which may have no direct meaning or is a different expression from their mother tongue (Miguel and Rogan, 2015; Crawford and Candlin, 2013; Chan, Purcell and Power, 2003). As a result of this recognition, offering English Language support programmes which educate ESL students on writing, reading and relevant terminology can successfully guide and support ESL Students to navigate through the complexities of the English language. However, as Starr (2009) indicates English support programmes are not always successful as they only focus on the basic English required by studying students and does not always factor in student motivation. Furthermore, there is a risk that educators and supervisors may view English support programmes as just development of writing and speaking skills and therefore not reflect that they also should develop skills for cultural sensitivity (Starr, 2009).

Whilst creation of additional support programmes can benefit ESL, it does not change or challenge traditional teaching styles in academia which ESL students can find hard to follow and learn from. A broader approach to developing English Language Skills as a pedagogical and reflective approach to teaching style, delivery of lectures within the classroom including consideration of simpler explanations and breaking down content and the provision of more opportunities to work in peer groups to support growth and networks are needed. This would ensure educators have an awareness of the importance of ESL Students social culture, peer learning and social networking and support is just as importance to academic success and higher competence in their nursing skills (Osman, Cockcroft and Kajee; Randon et al. 2010).

Conclusion

It is important to recognise that with the increase of a diverse culture in the nursing workforce there is increasing pressure to have a diverse student population and within that population not all the students will be from the country where the education is taking place (Watson, 2006). Locally, the Higher Education Institution have started to recognise the significance of an awarding gap for BAME students but there is a minimal focus on students

with ESL who may also be from a BAME background. Research has demonstrated that a multitude of factors needs to be considered for the ESL student including their culture, history and previous experiences alongside the basics of the level of their English, whether lower level or higher level for academia. Only at this point of understanding can English assessment tools, English Support Programmes and widening participation strategies be implemented successfully to address the awarding gap for students with an ESL and to help them achieve successfully in their course.

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