

ORIGINAL RESEARCH ARTICLE

Transforming the online learning space through advanced development retreats

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Learning technologies have the potential to transform Higher Education, although multifaceted demands on staff time, confidence and training in using new technologies, and a lack of support can make this transformation difficult. The University of Huddersfield recently transitioned to a new virtual learning environment (VLE), which provided the opportunity to change the way staff view and use the new VLE for teaching and learning. As part of this project, three off-site retreats were run to help staff to reflect on and develop their teaching practice to better support student learning in the digital space and develop advanced online resources that support the democratisation of learning, close differential attainment gaps and give every student the best chance of success. Although much is written about different models of practice, there is a lack of theory and conceptualisation around changing practice. Examining the motivations and experiences of staff who participated provides insight into the challenges of implementing change on an institutional level, whilst examining their setup and design highlights ways to support staff during this process. Using participant feedback and experiences to underpin this research, we explore the immediate and ongoing outcomes of these off-site retreats to help transform the University's approach to technology-enhanced learning.

Keywords: transforming practice; academic development; technology-enhanced learning; learning technologies; staff development

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Introduction

Higher Education Institutions have a responsibility to prepare students for becoming global digital citizens (Patton 2018), and technology-enhanced learning (TEL) can help break down traditional barriers and give a more diverse demographic of students access to education. Learning technologies, therefore, if implemented and managed appropriately, are seen to have the potential to provide more engaging and inclusive learning environments (e.g. Beetham and Sharpe 2013; Laurillard 2008; Salmon,

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Jones, and Armellini 2008; Young and Nichols 2017) and promote qualitatively richer learning amongst students (Kirkwood and Price 2014).

Despite compelling reasons for transforming use of technology in teaching and learning, various barriers conspire to hinder this happening in practice. These include resistance to change, a lack of confidence in using new technologies, an absence of training (both technical and pedagogical) and insufficient institutional support (Al Meajel and Sharadgah 2018; Latif 2017).

Bayne (2015) breaks down the term ‘Technology Enhanced Learning’ into its component parts, stating that it is rarely defined in the literature, assuming a shared understanding of the term. She also argues that the use of the word *enhancement* assumes that if technology is applied to learning, it makes it better in some way. Waters (2020b) describes this as storytelling, saying the term propagates the ‘fear that teaching and learning today are failing in particular ways’ (para 12). Although these reflections query whether technological use results in enhanced learning, new technologies come with new affordances that can be tapped into (Kemp and Day 2014). These new affordances can encompass things like extending classroom discussions in an online forum to encourage quieter students to post (Cheng *et al.* 2011), or using mobile technology to capture and reflect on things both in and outside the educational environment (Al-Adwan, Al-Madadha, and Zvirzdinaite 2018), both of which enhance someone’s ability to access and take part in education. The 2020 UCISA survey highlights several important drivers behind the adoption of technology in learning, including enhancing the quality of teaching and learning, improving student satisfaction and meeting student expectations (UCISA 2020). Such expectations are constantly changing and developing in line with the evolution and advancement of technology, and so educational approaches need to help prepare students to take advantage of the affordances and efficiencies of these technologies (Levy 2017).

Organisational change strategies to overcome barriers and drive progress can be conceived as *top-down* (policy and strategy instigated by senior management) or *bottom-up* (small-scale projects led by innovative practitioners) (de Freitas and Oliver 2005). A *top-down*, institution-wide transition to a new virtual learning environment (VLE) at the University of Huddersfield was used as an opportunity to stimulate more effective use of digital resources for teaching and learning. As part of this process, the University ran three offsite, advanced development retreats to help academic staff reflect on and make better use of technology in their teaching practice. The retreats were small-scale (less than 20 participants at each retreat) and *bottom-up* in strategy, to complement the *top-down* VLE transition. They were modelled on academic writing retreats (Kornhaber *et al.* 2016), and further details can be found in the online supplementary information. Whilst various models and strategies for organisational change exist (de Freitas and Oliver 2005), it is not always clear how and why certain strategies might be effective for a given context. Taking the retreats as one specific case study, we examine their effectiveness by exploring three research questions:

RQ1. What were the enabling factors that contributed to the perceived success of the retreats?

RQ2. Did the participants develop any digital resources that would support student learning?

RQ3. Did the retreats have any wider impact on the participants and their practices in the academic year that followed?

Methodology

An interpretivist approach and qualitative methodology were adopted for this study, as the aim was to understand the lived experiences of participants (Cohen, Manion, and Morrison 2018; Hammersley 2013). Interviews were the primary data collection method used in this study; however, researcher observation and surveys were also used to provide additional data sources. The interview sample was determined using a purposive sampling strategy (Gentles *et al.* 2016). All the retreat participants were invited to take part in the interviews, and of those who agreed, seven participants were selected to provide maximum-variation and information-rich cases from a range of course teams that represented different subjects and disciplines. Six of the interviews took place about 6 months after the retreats, although some of these interviewees thought it too soon to draw conclusions about impact of the retreats in their first interview. Follow-up interviews with the seventh and two of the original six were conducted about 12 months after the retreats to determine and examine any impact over an academic year. The seventh person was interviewed to explore if any further points were made by people who were not chosen to be interviewed originally. It was found that the same themes were recurrent in this interview, indicating that data saturation had been achieved (Kerr, Nixon, and Wild 2010), and no further interviews were deemed necessary.

The interview responses were analysed using a thematic analysis. A template was initially created using *a priori* themes. The themes were then developed further by two of the authors reviewing interview responses independently. These authors then jointly refined the themes and agreed standards for the coding of the responses to increase validity of the analysis. Coding of the text was completed using NVivo 12 (QSR International). Codes (P1–P7) for the interview participants have been used in this paper to protect their identity, and any identifying information has been anonymised.

Ethical approval was obtained from the School of Applied Science ethics panel. Participation in the study was voluntary, and the interviews were recorded and then transcribed without the name of the participant on the transcription documents.

As the research is small-scale, we recognise that the findings may not be generalisable over a larger population. Instead, the findings offer a case study with practical insights for those who may want to support a transformation in teaching and learning practices.

Results

Motivation and enabling factors (RQ1)

This section explores research question 1 by examining what motivated participants to take part and what factors helped them achieve their goals. The analysis of the interview transcripts resulted in the development of three overarching themes for the research question: time/space, support, and structure.

Time and space

It appears that it was ‘time as ever’ (P4) that prevented staff from concentrating on transforming their digital provision, as ‘there is always a long list of things that you

would like to do if you could do but trying to juggle it in amongst everything that we need to do in our academic roles' (P4). Changing a major system that tutors use regularly, no matter how beneficial it may be in the long term, is an upheaval for staff and has a corresponding learning curve as 'it does take a little while to set-up, as in just to get your head round it' (P1) before staff are able to get 'a bit more space, [and] make better use of [the VLE]' (P2). As one participant said: 'I'm willing to, it's just finding the space' (P5). As such, one of the main motivations behind attendance was that the retreats offered the participants an opportunity to 'have that time just to go away without other distractions' (P3) of their normal work environment, as 'it's a good thing just to focus' (P4). Not only holding these retreats offsite appeared to be vital to their success by removing distractions, but also because they gave staff the space and opportunity to work on something as a team. Academic staff very rarely have the luxury of dedicated time away as a course team to 'get away from everything else and just concentrate' (P6) on new ideas due to workload. Having 'that dedicated time for the team to get together' (P3) blocked off in their diaries meant that 'what we achieved was still great and we probably wouldn't have achieved that if we hadn't gone' (P1).

Support

Another important factor that contributed to the success of the retreats was *support on hand from experts*, including learning technologists, pedagogic and technical support, and a product expert from the VLE provider. There was an impression that 'a lot of people don't understand the scope and the depth of what Brightspace can actually do' (P1), which indicated a need for training that goes beyond 'how to' use a tool, and more towards 'trying to work out which bits work for different modules' (P4), so that staff could make informed decisions about changes to their digital practice. Participants felt the 'added benefit of having experts there, ready to be tapped into when needed. That we weren't just sitting on our own' (P3). This mix of expertise allowed any issues whether technical, knowledge-based, or pedagogical, to be addressed quickly and not hinder progress with one participant adding that without 'the support, yes, we couldn't have done certain things' (P1).

Structure

The final theme relating to the success of the retreats was around their structure and focus. The application process to attend the retreats required participants to have enhancement ideas and supporting materials developed and approved in advance. This ensured that the retreats were productive, and that people left with a sense of achievement at having produced a resource at the end of it. Some participants 'had a lot of the [quiz] questions already prepared' (P4) in order to get the most out of the sessions, whilst others who had not done as much preparation saw the value in this approach, saying that 'in hindsight we probably should've done more before we got there to get the most out of it' (P1).

Although the intentional design of the retreats was important to their success, the organisation and structure of the days was also key. Splitting each day into sections allowed timeslots for development (shut up and build), advice and support (help desk), and for each group to share what they were working on with others (show

and tell). Participants ‘thought the structure of it was really good that we did the work, that we had the time to work on our individual bits but that we did see what other work was going on’ (P4). The built-in opportunities to share ideas were popular, and participants ‘jotted down [ideas] in my notepad for “we’ll think about this for the future”’ (P3).

The retreats themselves included an overnight stay and support on-demand for the duration which participants described as ‘a little bit like a little treat as well, you know. It was quite nice to [...] be seen to be valued’ (P1). Staff felt ‘rewarded by having a couple of days away, which was nice really’ (P2), a feeling of being invested in which ultimately helped them make the ‘effort to engage and to try and use [Brightspace] in a more creative way’ (P1).

The timing of the sessions in terms of the academic calendar seems like a small factor but was crucial due to taxations on academic staff time during the semester. The start of term, assessment and marking periods, and during term time where teaching load is high are when staff are the busiest, so the retreats would not have worked well, had they been held during these times. We scheduled them for the end of June and early July which ‘was perfect because it fitted in between May marking and re-sit one’ (P4) but was also before staff took their annual leave around mid-July through August.

Resources produced (RQ2)

A range of digital resources were produced during the retreats, including quizzes, e-portfolios, intelligent agents and reading assignments. This section will explore some of these resources through the lens of Kirkwood and Price’s (2014) conceptualisation of technological enhancements to learning (see Table 1 for details of this model).

Table 1. Categorisation of TEL interventions, adapted from Kirkwood and Price (2014)

1. Replicating existing teaching practices	1a. Teaching replicated and delivered to students using some form of technology.
	1b. Using different technologies for delivering the same material or resources to learners.
2. Supplementing existing teaching practices	2a. Resources or tools are made available online to increase flexibility with regard to when and/or where students access learning activities.
	2b. Adoption of resources that are available in addition to regular course components, with a clear focus on benefits to student learning.
3. Transforming the learning experience	3a. Redesigning activities or parts of modules to provide active learning opportunities for students.
	3b. TEL activities effectively promote qualitatively richer learning amongst students.

Quizzes

Several teams of participants developed quizzes to support student learning. For one team, the aim was to give students the ‘opportunity to do some quizzes out of the classroom’ (P4), ‘rather than students doing collective questions in class’ (P4), which is commensurate with the basic ‘replicating’ level of intervention in Table 1. Putting the quizzes online allowed students to work ‘at their own pace’ (P4) and improved accessibility by, for example, allowing students to complete them ‘when they’re sat on the bus on the way in’ (P4). The team also provided ‘extra ... targeted resources’ (P4) by creating additional quizzes, which pushes the intervention to the ‘supplementing’ level in Table 1. The team took things a step further by providing detailed ‘feedback on each question so they can see exactly ... what they should have done’ (P4) and allowed students to repeat the quizzes with ‘different questions ... so that they will really test themselves as to whether they do understand’ (P4). This approach taps into the concept of ‘deliberate practice’ (Ericsson 2008) by providing opportunity to correct misunderstanding through feedback and moves the intervention into the ‘transforming’ level in Table 1.

Reading assignments

Several participants developed structured reading assignments to motivate student engagement with course content; this helped prepared them to participate in seminars and to complete major pieces of assessed work. For one participant who teaches law, students had ‘to read [legal] cases and make notes on them and then once you’ve done that you upload them and then you’ll get access to a quiz’ (P5). Because the quiz counted towards the final mark, it encouraged students to engage and emulate ‘what the top students do’ (P5) in terms of completing the recommended reading. For another participant who teaches engineering, students were provided with ‘reading material [and] a list of guided reading questions... They then make notes against those questions, which become their revision notes. ...they submit those notes to their e-portfolio’ (P6). The students then completed a survey to indicate the ‘areas that they’d like some more explanation for’ (P6). This feedback was then used to prepare a follow-up interactive seminar, which aligns with the concept of ‘just-in-time teaching’ (Novak *et al.* 1999). After the seminar students take ‘an online quiz ... it’s essentially an open-book exam ... to test have they actually understood it.’ (P6). Reflecting on the approach, the participant felt it was better than ‘spouting a lot of stuff at them in a lecture and expecting them to remember it and then regurgitate it in an exam’ (P6) because now students ‘actually understand the subject’ (P6), and they attributed this to ‘focusing the attention on developing understanding, rather than just memory’ (P6). The approach firmly sits within the ‘transforming’ level in Table 1, since the module was redesigned to increase active learning and student participation.

Wider impact (RQ3)

Reflecting on the retreats, participants ‘really felt like I got an awful lot out of the two days that we were there’ (P4), with a foundational part of this impact being that they were ‘really good for building up confidence with what you were doing and the materials that you were developing’ (P4), which, in turn, ‘certainly helped to quickly put other Brightspace modules together’ (P6). Part of this increased confidence comes

from the organisation of the retreats resulting in work being ‘done’, and therefore staff learning by doing, but also from the scheduled opportunities for participants to openly share details of what they were working on with everyone else.

Participants reflected on the ‘show and tell’ sessions, saying ‘Often it would be like, “Might borrow that idea,” [...] and you’d take an idea and you’d think, “Actually, that would work quite well.”’ (P4). Engagement with others was inspiring, and participants ‘jotted [ideas] down in my notepad for “we’ll think about this for the future”’ (P3) and were consequently exposed to more tools and approaches than the ones they themselves had designed. There was a sentiment that Brightspace ‘does so much and you can’t do everything at once, you’ve just got to pick some bits to change and then you think, “Next year I might do something different”’ (P4). These ‘show and tell’ sessions allowed participants to learn more about the possibilities and potential of Brightspace, which, in turn, led to a change in attitude towards the very nature of traditional teaching modes as staff could ‘see a lot of strengths in what we can do with Brightspace [...] if anything, it’s proved to me that you don’t need your traditional lectures, or necessarily even your face-to-face support to get things across’ (P6).

The retreats provided staff with an opportunity to reflect on their practice and consider how they might incorporate alternative theory-supported approaches. Staff felt it was ‘benefiting us as much as the students, in that it’s getting us to reflect’ (P3) and valued ‘seeing what works’ (P4) in terms of technology-enabled resources and approaches deployed in different contexts. For example, one participant ‘hadn’t really looked at using quizzes’ (P7), considering them unsuitable for their discipline, but ‘started to think of ways that they could actually apply in my practice.’ (P7), aligning with Kirkwood’s (2009) assertion that ‘academics need to re-assess their own beliefs and practices concerning teaching and assessment and their impact on the experience of learners’ for the improved efficacy of technology-enabled approaches to education. The fact that staff came away not only with what they created but also with a roadmap of ‘some really neat ideas’ (P3) to implement in the future, indicates a shift in their perceptions of what digital learning is and could be, not viewing their work over the retreats as a one-time event but more as a longer-term process that they are now setup to do and keen to invest their time in.

They were proud of what they had accomplished during the retreats and have been keen to disseminate their progress to others to share good practice ‘if it is working, if there is something we can share, then I’ll absolutely want to do that, without a doubt’ (P3). Some participants were proactive in their desire to extend their ideas to other cohorts of students and colleagues emailing ‘around the whole department and [saying], this is the way I’ve done it, this is a screen shot of what I’ve actually done with the groups’ (P4), whilst others chose to present their work and their findings at ‘the Teaching and Learning Conference, to show that [...] this is what I’ve done, this is how it’s been working. If anybody wants to steal the idea, that’s great, I’m more than happy for them’ (P6).

This desire to share indicates that participants judged there to be a real and beneficial effect as a result of the interventions they had implemented. There was a palpable change in student behaviour as they became more engaged with their learning, coming ‘into class well prepared...[as] it means we’ve got more time in class to go through other questions and to spend on discussions...’ (P4), an observation that was not uncommon; ‘it was positive because people were more prepared... People went away further along ... than they had done prior to me doing it in this way’ (P7). One of the key benefits of students being more engaged with the learning structure was that ‘they

are actually spending a lot more time actually reading round the subject than they would if it was just a lecture' (P6), which really helped their understanding. As such, the retreats appear to have had positive impact on student attainment, for example, one participant reported that '... the pass rate went from about 60% to 100%' (P6), and on student engagement with learning and understanding.

Discussion

Academic development is an ongoing process, since initial training and study are not sufficient to meet the complex and ever-changing requirements of the profession (Boud and Brew 2013) as academic staff are busy, with conflicting priorities and demands on their time (Gregory and Lodge 2015). The UCISA report cites 'time' as the main barrier to TEL adoption in not only the most recent but also every report it has done since its inception in 2005 (UCISA 2020). One of the main motivations behind attendance was that the retreats offered the participants an opportunity to 'have that time just to go away without other distractions' (P3) of their normal work environment, although it is important to note that academic staff are reluctant to spend their precious time and effort changing something if it does not have clear evidence of benefits (Price and Kirkwood 2014). The introduction of a specific technology does not automatically lead to improvements in learning (Kirkwood 2009), and tutors can, therefore, view its usefulness with a certain amount of scepticism (Petit dit Dariel, Wharrad, and Windle 2013). Bayne (2015) points out that technology and education are co-constitutive of each other and are entangled in assemblages of great complexity. The fact that TEL is subject to such scepticism, and complexity underlines the need for access to a greater evidence base of the positive impact it has on teaching and learning (UCISA 2020), although the overarching reason participants invested their time and effort in the retreats was because of their belief and desire to improve the student learning experience through better use of technology, with the time away and support provided at the retreats being viewed as an enabler to this. The pedagogical competence of teachers in using digital tools for teaching and learning is crucial (Englund, Olofsson, and Price 2017; Kirkwood and Price 2005; Ng 2015). However, not all UK academics feel well-prepared or confident teaching with online technologies (Watermeyer *et al.* 2020), suggesting that this is not adequately covered in training qualifications for HE tutors and/or subsequent academic development provision.

It is important to recognise that the success of any approach in education relies of the interrelations between the teacher, students and the subject matter, cf. the *Didaktik Triangle* (Bernhard and Case 2020). Success is not automatic, but instead requires care and skill. A practitioner must reflect on new approaches and underpinning theory, in the light of their prior experiences. This gives rise to a theory-practice-reflection nexus that is encapsulated by effective pedagogy (Murphy 2008). As such, it is not technology that enhances learning per se, but rather good pedagogy that has the potential to support teaching and enhance learning. A view confirmed by Watters (2020a) in relation to TEL – 'ed-tech isn't necessarily progressive pedagogically' (para 9). In line with these observations, the resources developed and changes to practice made by participants did not happen by chance. A series of introductory presentations run in advance of the retreats not only enabled prospective

participants to learn about and sign-up to the retreats but also provided examples of pedagogy-led, technology-enhanced learning approaches from the lead author's teaching practice, including the meaningful use of quizzes and reading assignments. The aim was to move academic staff beyond simply using the VLE as a content repository, as is commonly the case (Brady and O'Reilly 2020; Flavin 2016), which aligns with Watters' thoughts on the danger of equating ed-tech use with progressive pedagogy (Watters 2020a). These presentations were a crucial step in getting participants to reflect on their practice and think about if they could adapt these approaches for their own teaching. Once the 'penny dropped', prospective participants were keen to develop and incorporate these approaches. The importance of such an exchange of ideas is supported by Lave and Wenger's (1991) 'communities of practice' concept, with 'old timers' able to support and induct 'newcomers' into new practices.

The 'communities of practice' model of change was one of five perspectives of development in e-learning suggested by de Freitas and Oliver (2005). The approach taken in our study, with the introduction of a new VLE supported by the retreats, incorporates elements of several of those perspectives, which ultimately contributed to the success of the retreats. As de Freitas and Oliver (2005) suggest, a combination of top-down and bottom-up approaches to e-learning development is preferable. These retreats illustrate this, with the top-down decision to move to the new VLE, which aligns with de Freitas and Oliver's *Evolutionary Model* together with the bottom-up approach of individual change of practice facilitated by the retreats, which was then shared and cascaded to other tutors. Winning the 'hearts and minds' of those keen to embrace change, and spreading that message through these early adopters via the *Communities of Practice model* can be more effective than mandated approaches from the top management, which de Freitas and Oliver (2005) term the *Fordist model* of change, as this method often meets with resistance.

The subsequent sharing of good practice by participants resulted in many more colleagues from across the University learning about the technological and pedagogical affordances of using the online space to actively support student learning. Therefore, the benefits of running the retreats have not been confined to the small percentage of academic staff who attended, as the key messages and positive changes are continuing to cascade out across the University. Thinking about the innovation-adopter model proposed by Rogers (2003), retreat participants exhibited traits associated with the *early adopter* category; as they are integrated and situated within the local departmental/school system, this enabled them to become opinion leaders amongst their peers, providing advice and information about the innovations they adopted. This, in turn, facilitates change within the local context at a greater rate than would have otherwise been achieved. Furthermore, as retreat participants are not too far ahead of colleagues in the adoption process, they are able to act as mentors and role models.

Overall, accelerating the development of a motivated minority (the retreat participants) has helped build a critical mass that is beginning to expand the scale of adoption. The outputs of the retreat were not only the resources that were built during the time there but also the longer-lasting motivation to continue the work done in terms of dissemination of good practice to others, supporting colleagues, measuring impact and continuing both self and resource development.

Conclusion and recommendations

Running carefully designed offsite retreats provided academic staff with the support and protected time and space they needed to transform their online learning spaces. The concept of transformation is operative at a number of levels. At a basic level, the online space was transformed from a content repository to an environment that better supports student learning. Second, teaching practices were transformed to support active learning. Finally, taken together, these changes show potential for transforming student experiences and outcomes. There is also evidence that running such retreats can accrue longer-lasting and wider impacts, including sustained interest of participants for making continued developments to their teaching practice and a ripple effect, whereby, benefits of the retreats are cascaded to colleagues of participants. Since this was a small-scale study, the findings may not be directly generalisable to other contexts, and further work is required to establish the longer-term benefits of the retreats, including measuring impact on student experience and outcomes.

Based on the findings of this work, we suggest that anyone running workshops to help academics develop their digital teaching practice consider the following recommendations as part of their design and implementation:

- (1) Include an application process that showcases to participants what is possible and that requires the development of a plan and basic supporting resources prior to the workshops.
- (2) Arrange workshops away from the distractions of the normal work environment.
- (3) Incorporate features that help participants feel valued and invested in.
- (4) Resource the workshops with personnel that can support participants to overcome barriers in real time.
- (5) Allow time for sharing and discussing ideas, so the participants can support and learn from each other.
- (6) Take a pedagogy-centred approach throughout the process to help participants to reflect on and develop their teaching practice.
- (7) Encourage participants to share their new knowledge and teaching developments beyond the workshop to extend the potential impact.

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