What are the factors that encourage and inhibit student engagement in online activities?

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Introduction

Learning Development (formerly known as The Centre for Achievement and Performance) at the University of Northampton is a centralised support service within the Library and Learning Services (LLS) department which offers a range of transferable cognitive and academic skills development opportunities for students. This has generally operated through providing workshops on request from subject lecturers and module leaders. The workshops on topics like critical thinking and academic writing are then embedded into module timetables. In addition, online resources such as videos, study guides and interactive online activities have been available in a centralised online platform, entitled Skills Hub, as part of LLS online resource areas.

Learning Development has been modifying its delivery of workshops from a solely face-to-face model to a blended model of delivery in accordance with the new pedagogical model at the University. Online activities are intended to offer scalable opportunities for personalised, independent learning as well as low pressure opportunities for students to practice academic skills. A blended approach will hopefully maximize the impact of face to face time with students given that Learning Development often only see particular student groups once or twice a year. Learning Development have trialled blended learning by offering online preparatory and follow up tasks, in the format of e-tivities, built around the workshops. A variety of different approaches have been taken to this new blended delivery including; opportunities for structured writing practice; opportunities to shape the content of face-to- face workshops; discussion boards based around students' concerns with academic and cognitive skills; preparatory writing exercises; interactive activities developing and modelling specific skills such as synthesis and formative individual feedback on written tasks.

Much research has been done into what makes a 'good' e-tivity: clear instructions and design, purposeful, perceived relevance, practice opportunities, interactive, structured pathways and sequencing, effective feedback and interactions with the tutor (Swan, 2001; Sims et al., 2002; Lim et al., 2007; Salmon, 2013; Clark & Mayer, 2011; University of Leicester, n.d.) However, even when Learning Development tutors have followed these principles in the design of their e-tivities, student engagement

has varied markedly: one cohort might see 80% engagement; another none. Student engagement here is understood as completion of all or part of any assigned e-tivity. This might include simply reading a discussion board, posting threads, completing interactive tutorials, and so on.

Possible explanations for this variation included; student perceptions of the e-tivity; self-selection bias on the part of students in accordance with student behavioural characteristics (Salmon, 2013, p. 180); cultures of engagement with blended learning within the module as a whole; the time of year and student workload; the perceived value of the task; characteristics of particular cohorts; the design of the task itself and the perceived relationship between Learning Development and the subject staff. The main hypothesis amongst the team was that because the Learning Development Tutors, as a centralised support service, were seen less frequently by students than their direct teaching staff that, perhaps, their learning activities were not seen as being of the same value to the students as the work set directly by their module teaching staff. However, given the breadth of the possible explanations for variance in engagement it was vitally important to explore the causes or factors affecting these behaviours from the student perspective. For this reason the study was both led by student researchers and centred on student responses. This study was, therefore, initially aimed at finding out what factors encourage and inhibit student engagement in online activities *specifically* in relation to the e-tivities designed to help students develop their academic skills. It is worth noting, that in all instances the students recruited are campus based students.

Literature Review

Over the last 15-20 years, a wide range of research has been conducted into blended learning. As such, this report has not attempted a full or systematic literature review. For a full review, please see the (now rather dated) Higher Education Academy review report (Sharpe et al, 2006). Here, we give a very brief overview of some of the key themes and trends in the selection of literature reviewed by student researchers. Although there is some variety in the phrasing of definitions and the emphasis on pedagogy or technology, there is broad consensus on what blended learning means. It is commonly understood as the combination of educational technology, typically only, with face-to-face instruction (Bliuc, et al, 2007; Buckley, et al, 2010; Wu, et al., 2010; Smith, et al., 2012; Alammary et al, 2014). The 'flipped classroom' is one of the most widely publicised instances of blended learning in higher education, but should not be equated with the broader category of blended learning. Blended learning also includes problem based learning (e.g. Greener, 2015), online group work (e.g. Rovai and Jorden, 2004), scenario-based learning (Clark and Mayer, 2012) and structured online tasks, also known as e-tivities (e.g. Salmon, 2013). Salmon's (2013) work here can be considered a touchstone. Much of this literature can be categorised as case studies or evaluations of particular innovations, with recommendations for use in particular subjects (e.g. George-Walker and Keeffe, 2010; Singleton, 2013).

Numerous studies identify ongoing issues of engagement amongst learners in higher education with current blended learning strategies (e.g. Swan, 2001; Sims, et al, 2002; Singleton, 2013; Henrie, et al.,

2015; Greener, 2015; Powell et al., 2015, see Appendix A for a table with all factors identified in the literature). Among these challenges are negative attitudes towards the application of technology in the classroom, which can lead to distress and confusion in some students due to the perceived lack of control over technology and learning environments (Holley and Oliver, 2010). Communication between staff and students has been recognised as a problematic area (Sims, et al, 2002; Powell, et al. 2015). Confidence in learning and applications of technology appear to be key for high quality participation (Åkerlind,and Trevitt,1999; Greener 2008). Another factor that can trouble the efficacy of blended learning applications is the scale of interaction between participants and the facilitator (Wu, et al., 2010) and/or between participants (Singleton, 2013). While an 'interaction equivalency' effect has been posited (Anderson, 2003) suggesting that it is not necessary for students to interact exclusively or primarily with the instructor, students may value various interactions differently (Rhode, 2009). Some form of interaction, however, is necessary for sustained engagement (Salmon, 2013). In other words, good blended learning is not content delivery: it is the systematic development of interactive tasks in both online and face-to-face contexts. It also means that blended learning needs to be learner-centred, in other words responsive to every group of students' individual and situational learning needs (George-Walker and Keeffe, 2010).

There is also considerable literature which seeks to review the 'advantages and disadvantages' of blended learning (e.g. Powell, et al, 2015). Blended learning has been shown to positively influence dropout rates (Lopez-Perez, et al, 2011), academic performance (Lopez-Perez, et al, 2011; Rovai and Jorden, 2004), social connectedness (Rovai and Jorden, 2004; Morley, 2012). Unfortunately, much of the research is rather simplistic in the framing of these benefits of blended learning. The lack of clarity and absence of consistent evidence that pedagogical innovations in blended learning in higher education draw on the lessons of previous experimentation is, perhaps, concerning. This situation may in part be because many of the relevant papers are published in educational technology journals such as Internet and Higher Education, Computers & Education, Journal of Educational Technology, and so on and as such may be biased. That said, there is also recognition that adopting blended learning approaches is potentially disruptive for students, changing their conceptions of learning (Akerlind and Trevitt, 1999) and knowledge (Buckley, 2010). Students may reject online materials, in preference to traditional texts understood as 'authentic academic knowledge' (Orton-Johnson, 2009). As such, careful design and awareness of common obstacles is essential, as is the recognition that adopting blended learning is a process of change (Akerlind and Trevitt, 1999).

The additional issue with being able to evaluate blended learning, is one that plagues education research in general - the virtual impossibility of being able to extrapolate specifically for the impact of blended learning interventions from all the other variables that impact different responses in a student cohort. When developing blended learning approaches, lecturers may, therefore, struggle to find literature that clearly lays out exactly how to operationalise best practice in blended learning and how to evaluate its impact. Gilly Salmon's (2013) work specifically addresses online learning courses and, as such, is probably the most explicit guidance regarding online activity design.

To summarise, notions of best practice are continually evolving and emerging with new studies as they arise but to date, general good practice guidelines for blended learning constitute the following: clear design (Swan, 2001); good communication (Swan, 2001); discussion/evaluation of online tasks with students (Swan, 2001); interactivity (Lim et al, 2006; Al-Hunedi and Schreurs, 2012, Wu, et al., 2010); clarity of instruction (Lim, et al., 2006; Henrie et al., 2015); relevant activities (Henrie et al, 2015) linked to the curriculum (Mayes and de Freitas, 2004); transparency in learning approaches (Porter, et al, 2016) and some capacity for students to design or select aspects of their learning environment (George-Walker and Keeffe, 2010). Table 1 offers an indicative selection of the available literature on blended learning, which is extensive (albeit of varying quality) and highlights the factors the literature claims have an impact on student engagement.

Table 1: Factors Affecting Engagement identified in literature

	Factor	Citation
When undertaking online tasks the following factors should be included or addressed by design:	Social contact and collaboration	Swan, 2001; Sims et al, 2002; Rovai and Jorden, 2004; Donnelly, 2010; Morley, 2012; Salmon, 2013; Singleton, 2013; Sheffield et al., 2015; University of Leicester, n.d.;
	Interaction	Donnelly, 2010; Wu et al., 2010; Salmon, 2013; Singleton, 2013; Wong et al., 2014; University of Leicester, n.d.;
	Tasks that allow students to engage in knowledge creation	Salmon, 2013
	Peer directed tasks	Salmon, 2013
	Accessibility and perceived ease of use	Sun et al., 2008; Wu et al., 2010; Salmon, 2013
	Perceived relevance and clear purpose of tasks	Mayes and de Freitas, 2004; Rovai and Jorden, 2004; Sun et al., 2008; Greener, 2015; Henrie et al., 2015; Powell et al., 2015; University of Leicester, n.d.;
	Independence/ autonomous learning	Sims et al, 2002; Salmon, 2013; Singleton, 2013;
	Metacognition & critical reflection	Sims et al, 2002; Salmon, 2013; Singleton, 2013;
	Student agency (capacity to choose what to do or how to engage)	Sims et al, 2002; Singleton, 2013; Henrie et al., 2015; Greener, 2015; Powell et al., 2015;
	Clarity of tasks and instructions	Lopez-Perez, et al. 2011; Salmon, 2013; Henrie et al., 2015; University of Leicester, n.d.;
	Underpinning pedagogical design	Swan, 2001; Mayes and de Freitas, 2004; Rovai and Jorden, 2004; Powell et al., 2015;
	Time	Rovai and Jorden, 2004; University of Leicester, n.d.;
	Flexibility	Rovai and Jorden, 2004; Sun et al., 2008;
	Quality content	Sun et al., 2008; Wu et al., 2010;
	Multimedia	Rovai and Jorden, 2004;
	Learning environment	Mayes and de Freitas, 2004; Wu et al., 2010;

Student engagement will also be impacted by their own...	Motivation	Rovai and Jorden, 2004; Lopez-Perez, et al. 2011; University of Leicester, n.d.;
	Familiarity with learning tools	Lim et al., 2006; Henrie et al., 2015; Wong et al., 2014;
	Approach to study/ learning preferences and habits	Lim et al., 2006; Orton-Johnson, 2009; George-Walker and Keefe, 2010; Singleton, 2013;
	Past educational experiences	Akerlind and Trevitt, 1999; Sheffield et al., 2015;
	Conceptions of learning & knowledge	Akerlind and Trevitt, 1999; Lim et al., 2006; Orton-Johnson, 2009; Buckley, et al., 2010;
	Demographic characteristics	Lu and Chiou, 2010; Lopez-Perez et al., 2011; Singleton, 2013;
	Self-efficacy (Anxiety / confidence) r.e. technology	Sun et al., 2008; Wu et al., 2010; Singleton, 2013;
	Learner situational needs	George-Walker and Keefe, 2010;
	Stress	Akerlind and Trevitt, 1999
	Performance expectations	Wu et al., 2010;
	Perception of the value of blended learning & its educational purpose	Salmon, 2013; Porter et al., 2016;
	Technical skills	Salmon, 2013; Buckley et al., 2010; Holley and Oliver, 2010
Student engagement will also be impacted by the attitudes, beliefs and competencies of the staff member:	Instructor communication	Swan, 2001; Rovai and Jorden, 2004; Greener, 2015; Sheffield et al., 2015;
	Instructor preparedness and competence	Rovai and Jorden, 2004; Wong et al., 2014;
	Instructor attitudes towards Blended Learning	Sun et al., 2008;
	Instructor support mechanisms	Donnelly, 2010; Porter et al., 2016;
	Relationships with Tutor	Swan, 2001; Salmon, 2013; Singleton, 2013;
Student engagement will also be impacted by institutional factors:	Infrastructure and support to tutors	Sims et al, 2002; Sheffield et al., 2015; Wong et al., 2014; Porter et al., 2016;

Methodology

The research project adopted a qualitative methodology involving students as co-researchers in order to ensure a student-led and student-centred research approach. Student-researchers were involved in all aspects: design of the research project, contributions to ethical statements, writing of focus group questions, conducting of focus groups, transcription, coding, analysis and dissemination.

A qualitative approach was considered appropriate to achieve the aims of exploring students' perceptions of engagement in blended learning, offering rich, subjective data to illustrate individual experiences. Therefore, five student focus groups with 24 students were conducted in seminar sessions, and one outside class time. These groups included students from the School of the Arts, the School of Health, the School of Social Sciences and the School of Education. Seminar groups were targeted where they had received one or more Learning Development workshops which incorporated blended learning. Seminar time was used with the agreement of teaching staff to ensure higher participation, and to enable the discussion to entail a degree of reflexivity on students' study habits. This is an opportunity sampling approach, based on which students attended on the day in question, and on which students are allocated to which seminar session. Students were not be selected on the basis of any demographic information. This sample cannot be considered statistically representative of the University population, but does indicate a range of different experiences and perspectives.

Permission to enter seminars was obtained from module leaders and the most opportune time to come into seminars negotiated for minimal interference in the students' learning experience. Prior to the seminar session, students were advised that this research was taking place. Student co-researchers introduced the project, and talked through an informed consent process, and asked to sign forms, in keeping with the BERA ethical guidelines (BERA, 2016). Students who asked to withdraw at the beginning of the study participated in the same discussion topics but unrecorded, for attendance reasons. All participants were over 18 and the topics under discussion were non-sensitive. All questions were phrased in generic terms in order that the students were remarking on the general student engagement amongst the cohort rather than their own performance in order to avoid embarrassment or blame. Students were asked not to identify themselves on the recording and all data was stored anonymously. It has been reported below with all identifying information redacted.

Focus groups were led by student-researchers, to avoid any unwitting bias due to students feeling pressurised by the tutors' presence, given that the staff researchers were responsible for the design and delivery of some of the blended learning activities. They occupied 30 minutes of a scheduled seminar, with the exception of one focus group which was conducted with a mixed group of students from different modules. Seminar tutors left the room to allow student participants to respond freely. In collaboration with staff researchers, student researchers wrote a series of open questions which addressed students' perceptions of general patterns of engagement in e- tivities. For example, 'what do you think encourages students to complete tasks online?'. A semi-structured approach was adopted,

such that the schedule of questions were adapted in phrasing and order to respond to the discussion and the group. Additional questions were also asked where appropriate, at the discretion of the student researchers. Where groups exceeded 10, student researchers divided them into smaller groups and facilitated discussion by providing questions on cards and circulating to keep discussion on track. Conversations were captured in a digital recorder and transcribed. Training was provided in the effective conduct of focus groups, and the student researchers worked in a pair to improve the quality of data collection. In a reflexive process, staff researchers listened to the first focus group recordings and discussed the approach to facilitation with student researchers. The student researchers critically reflected on their own actions and modified the questions asked and their style of probing questions, with the support of the staff researchers.

Inductive thematic analysis was conducted by both students and staff researchers using Computer Assisted Qualitative Data Analysis Software (Nvivo). Training in manual data coding was provided and initial coding approaches discussed, before inputting into the software. Focus group data was inductively analysed, looking for key themes (Boyatzis, 1998; Joffe and Yardley, 2004). All transcripts were double coded by a students and a staff researcher in order to maintain consistency of student perspective throughout the research project. The results of this inductive coding were then sorted into a thematic structure in a collaborative meeting. The transcripts were then re-coded to ensure consistency of application of the codes under the thematic structure.

Results and Analysis

Learning Development

Students did not differentiate between Learning Development's blended learning activities and main course delivery by their subject tutors. In fact, unless specifically prompted or reminded, the students invariably did not refer to Learning Development's activities at all but rather focused on their module experience.

When Learning Development set about undertaking this research it was to try to uncover why engagement in their activities varied so markedly despite adhering to best practice guidelines for design. The lack of focus by the participants on the Learning Development activities and the rapid switch within the first few minutes of the focus groups to addressing their module at large may indicate the heart of the problem for Learning Development. Learning Development provide a very finite number of interventions into modules, usually no more than one or two a term or even per year. It is clear that interventions from an external team make little or no impact on the students' perception of their module content with respect to online learning. In other words, Learning Development are not sufficiently visible to the students from an online perspective and the interventions are not frequent enough to make a significant impact on students perceptions of online learning. Additionally, when Learning Development utilise a blended delivery method in a module without blended delivery as standard, then the students do not have enough of a grasp on the learning approach or the underpinning skills (such as where to find the activities in their NILE) to be able to engage. Even if this is explained and demonstrated by the Learning Developer, this is rapidly forgotten in the context of a module that rarely, if ever, works this way again.

It is, therefore, advisable that Learning Development operate extremely closely with module tutors to develop online components that mirror what the module tutor is doing themselves with respect to online learning, as well as ensuring that the Learning Development materials are promoted and sustained by the module tutors. Academic skills development should be embedded within modules as seamlessly as possible and not viewed as a 'bolt-on' that satellites core curriculum. Learning development activities need to happen in the context of ongoing and sustained engagement with blended learning within the module. Both online and face to face activities should where at all possible be team taught so that students equate academic skills development directly with their ongoing subject based learning.

Concepts of blended learning and 'online activities'

Participants were generally confused about what might constitute an 'online activity' or indeed 'blended' learning. So rather than focusing on specific online learning activities the students reflected on ***all*** aspects of their experience with the VLE, including online assessment. This is further explored under the factor 'communication' so at this juncture it suffices to say that as a result of this confusion, the findings of the study are much broader than originally intended. The comments from the students reveal

far more about their perspectives on the use of the VLE and online learning in general rather than in relation to specific online tasks.

'Conditions' and 'Factors' that inhibit or encourage engagement in online learning

The results can be conceptualised as belonging to one of two categories: 'conditions' for blended learning and 'factors' for student engagement. 'Conditions' are necessary and universal for all students; if the conditions cannot be met, successful engagement is highly unlikely. Responsibility for conditions lies with staff and institutional policies and engagement. For example, staff can establish accessible e-tivities and effectively communicate their purpose and how to complete them; this constitutes conditions of engagement.

In contrast, the factors affecting student engagement are individual, personal and particular to the student, cohort and discipline. They do not lie entirely within the control of staff; that said they can be supported and bettered through effective educational practices. For example, a student may have low resilience for challenging activities and although staff can support the student in developing better resilience they cannot create resilience for the student; this constitutes a factor.

Extracts from transcripts have been used to illustrate findings. When a facilitator is speaking they are marked as F; a student respondent is marked as S.

1) Fundamental conditions for Blended Learning

The conditions outlined in this section might be considered to be relatively obvious, certainly they are already well documented in the literature (Swan, 2001; Sims et al., 2002; Lim et al., 2007; Salmon, 2013; Clark & Mayer, 2011; University of Leicester, n.d.). However, the fact that these issues continue to recur indicate that they are not being consistently successfully met in practice. On this basis they bear repeating.

1a) Staff engagement

The extent to which academic staff have engaged with blended learning and are experimenting with different technologies in and outside the classroom varied significantly in our sample due to the fact that the institution is midway through the implementation of blended pedagogy. This allowed us to see a marked variance in student engagement with blended learning which consistently mirrored the teaching staff's own experience, beliefs and engagement.

Despite selecting students that should have experienced at least one Learning Development e-tivity, some students reported that they had never been assigned any blended learning activities:

S: “I don’t think we’ve ever been set any to do.”[1]

This indicates that non-engagement was a direct result of a lack of staff engagement with blended learning in the module to date. One student in our own study suggested that staff engagement may be due to lack of awareness of blended approaches.

S: “It would not surprise me if the tutors were as unaware of those sorts of things as we are…”

This situation means that the majority of the students has failed to appreciate the the activities they might be doing online between classes are supposed to support specific learning objectives and feed into their learning in class and their assignments. Previous literature highlights the importance of instructor attitude towards blended learning (Sun et al., 2008) in ensuring that students engage.

Other students in the study who had been assigned e-tivities or online work as part of their module reported a lack of support in terms of explanations of the activity, demonstration of navigation to the activity and technically how to accomplish what was required. This made completion of the task difficult, an issue also highlighted by Porter et al., (2016).

S: “well we sat in the library for a few hours trying to figure it out and do everything!”

Staff competence in supporting blended learning models and best practice approaches to the facilitation of online tasks is known to impact student engagement (Rovai and Jorden, 2004). Demonstration of the task in face-to-face class time, use of computer labs and signposting to support available may help. Poor facilitation of activities, such as no feedback or follow-up on tasks caused students to opt out of completing subsequent tasks which they perceived to be useless or undervalued:

S: “If there were some feedback…otherwise we can’t learn from it and improve.”

F: “and did anything ever come of that [the e-tivity set]?
All S: No, No, no.
S: We have not even been asked.”

[1] Quotation marks are used to demonstrate whether quotations are stand alone comments that have been extracted from the transcripts to illustrate a point, or belong as part of a short dialogue. Where an individual remark is being used it is self contained in quotation marks, for example: S: “Quote.” Alternatively, where a dialogue is being used, a quotation mark is used at the beginning and the end of the passage of dialogue, like so: S: “Quote. S: Quote. S: Quote.”

S: “Hmmm, its feedback I think that is more of an issue with e--learning. Maybe it is the inconvenience of having to go back through (the VLE) and see if anything *has* been updated as promised.”

This not only highlights that staff engagement and competence impacts student engagement but also the importance of the relationship between the online and the face-to-face elements of blended learning. For student engagement to be sustained, the online learning activities have to be incorporated into subsequent learning events. For example, student responses to an online task might form the basis of a debate in the classroom. The importance of meaningful and relevant tasks is explored in multiple studies (Mayes and de Freitas, 2004; Rovai and Jorden, 2004; Sun et al., 2008; Greener, 2015; Henrie et al., 2015; Powell et al., 2015; University of Leicester, n.d.). Students are found to be more engaged when they can clearly identify the relevance of tasks and the benefits (Henrie et al., 2015). Rovai and Jorden (2004) particularly emphasise the importance of tasks which develop skills the students are able to clearly link to their intended future professions and endeavours. This was borne out in our own study when students referred directly to the practical skills learnt incidentally in the course of completing a Learning Development e-tivity. Because it involved subject related skills, they perceived it to be meaningful.

F: “Which part did you enjoy then?
S: The actual practical side of it.”

The University of Northampton currently provides a range of staff development and support, such as digital ‘playdates’, app cafes, a dedicated Learning Technology team and workshops (e.g. C@N-Do), to help with the pedagogical underpinnings of active blended learning (ABL), the skills required to manage the facilitation of online learning from both a technical and pedagogical perspective. However, the student feedback suggests staff may not be aware of or accessing the development opportunities available or that, as yet, the provision is not meeting the requisite need at the requisite time. This is likely to cause increasing difficulties as student expectations regarding technology use rise in line with their identity as consumers of higher education. Institutional and sector wide support to provide dedicated pedagogical redevelopment time is critical as many staff indicate that lack of time for reflection and available information for pedagogical development is a perpetual problem.

Additionally, having available evaluation data in cases of early adoption is particularly significant for institution-wide adoption (Porter, et al., 2016). At UoN, this is currently available in multiple locations and formats, such as the Learning and Teaching Conference, publication in the in-house journal ELEHE, as well outputs from the Innovation Fund (ILT). However, this diversity of formats makes it difficult for staff to quickly obtain clear evaluation information about previous innovations. Given the increasing pressure for universities to develop digital literacy in both staff and students and the implications of this for the Teaching Excellence Framework, it is vital that institutions allocate both money, time and prestige to teaching and learning development and dissemination.

Among some participants, there was a strongly negative perception about staff's reasons for engaging in blended learning.

> S: "It is teachers avoiding teaching. So they are just like… because they don't want to turn up to class they are just sending you some activities."
> S: "Yes it can be a lazy way of teaching or people think that it is a lazy way of teaching"
> S: "If you can't be bothered to teach that element of it, it can't be that important."

Online components of blended learning are thus not seen as 'teaching' by this subset of students; it is face-to-face engagement which these students identified as being 'real' teaching. The consonance of students' conceptions of learning with a blended learning model thus impacts engagement in tasks (Akerlind and Trevitt, 1999; Lim et al., 2006; Orton-Johnson, 2009; Buckley, et al., 2010). Students appeared to reflect staff attitudes: if the staff placed little or no value on blended learning then the students picked up this message and therefore, did not engage with these elements of the course. Conversely those staff with negative attitudes or who appear to students to be using e-tivities to 'tick the box' of blended provision caused the student cohort to be negative in outlook.

> S: "…why should I even be doing this no one else can be bothered…"

In this context, the student was referring to staff 'being bothered' to teach. Greener et al. (2015) link this with consumerist attitudes, such that students perceive that they are paying for a campus-based face-to-face learning experience. Students may thus be resistant to active learning more broadly, as well as online learning (Greener et al., 2015). The challenge to negotiate is, therefore, to articulate the pedagogical principles and benefits of an active, blended learning model to students.

More fundamentally, this may suggest that some students do not trust some staff and therefore exert their agency in not completing tasks set (see 'beliefs and motivations' section). Where students trust staff, they are more likely to participate in tasks, even where the purpose and benefits remain implicit. Building trust and relationships with students is a challenging and longitudinal process but is the most fundamental to the success of any pedagogical approach. The recent Jisc survey (2016) indicates that students are perfectly prepared to accept perceived 'failings' in a member of staff, such as those likely to occur during educational innovation, if they trust in staff's competence and motivations.

Those students who responded positively to blended learning tended to have tutors who exhibited positive engagement with blended learning and technology, clear expectations and instructions.

> S: "For me, I just do it anyway even if it's not compulsory I'm probably going to do it because there's a good reason someone has (set it up?)"

This suggests a degree of trust in their tutor's pedagogical decisions, which is not always present.

So where staff engage positively with blended learning, incorporate and make use of the outcomes of online tasks, and build on relationships of trust with students, students are more likely to buy in to blended learning as 'real learning' because they believe in the motivations of staff for adopting these approaches. Engagement is likely to be higher under these conditions.

1b) Communication

The findings revealed that effective communication between staff and students constituted a key success factor for student engagement. This can be divided into two categories: a lack of communication or a miscommunication between staff and students.

An aspect of the condition for clear communication is the requirement to be transparent with students about underpinning pedagogy. This became clear to the research team because considerable confusion was present in the student focus groups regarding the meaning of the term 'blended learning' and its purpose:

> S: "Oh we get online tests (sounds surprised).
> S: I don't think it's the same thing.
> S: Yeah, well it is submitting essays online.
> S: Yeah… that will be just be is it Turnitin or that would be done…
> S: Yeah I think so, blogs and Turnitin…
> S: By blended do you mean classroom based and online?"

This suggests that the meaning and methods of blended learning have not necessarily been consistently communicated to students nor has the rationale for moving to blended learning been made clear. The importance of communication to successfully engaging students in online tasks has been repeatedly emphasised in previous studies (Swan, 2001; Rovai and Jorden, 2004; Greener, 2015; Sheffield et al., 2015).

Additionally, some students claimed that they had not been informed about the availability of e-tivities:

> S: "I don't know whether it is down to the tutors not informing us or…"
> S: "Not everybody knows about it. So I haven't done it because I don't know what it is."
> S: "I wasn't actually entirely aware of them."
>
> S: "I wasn't actually aware of those…
> S: That's the problem."

Many students attributed non-participation, at least in part, to a lack of awareness of the activities both in terms of where they were on the VLE, what was expected of them and why they were important to their learning. The lack of awareness was raised in every single focus group. This suggests that non-engagement may often be involuntary rather than purposeful.

Some had failed to understand the value and purpose of the activities:

> S: "I didn't realise there were stuff we could have used to help us with actually learning.

S: But that's what they are saying about the e-tivities, they are meant to be there to help us not like the blogs and stuff, but there is actual stuff to help you if you are struggling..."

In this particular group, the student had to explain this rationale to other members of the group, who had not appreciated this logic, or were more sceptical about the efficacy of e-tivities. This makes clear the impact that being informed of the educational rationale behind interactive online tasks can have on student appreciation of online activities.

At times, students reported experiencing information overload due to excessive, non-targeted and mass communication. Students commented the VLE announcement function was overused, leading to redundancy of information.

S: "yeah I think [tutor name removed for data protection reasons] is the worst because he puts everything twice … it's really confusing."
S: "you have seen so much irrelevant stuff that you don't have time for, [.....] it is unclear if that is a feed or if it stuff that has already happened."
S: "sometimes the amount of notifications put me off as well, coz you go on there and you have like 25 things to look through and it's like oh for god's sake!"

This suggests that too much communication can be as bad as too little, and that managing the volume of communication and information through the VLE is key to encouraging student engagement.

1c) Well-designed VLE and online learning

Students raised three key issues around the design of the VLE: appearance, purpose and functionality.

In terms of the appearance, students had mixed views. Many students' initial response to questions on the visual design indicated that it had no impact on their engagement:

S: "The visual design doesn't really have an impact on me because I know I've got to do it."

This response highlights a key issue, which is whether the e-tivities are compulsory. If they are optional, the visual design and ease of use may have a more significant impact.

Other students, unsurprisingly particularly those from Art and Design-based disciplines, indicated that they felt it had significant impact on their value judgements regarding the course and the institution as a whole:

S: "I think if it looks like, you know [...] 'teletext', [...] I am so much less likely to want to use it […] I have less faith in the developer [...] That is not what I expect from the institution I am paying thousands of pounds year to have the benefit of using their resources."

Here, a consumer standpoint is clearly apparent, and a relationship is drawn between the perceived competence of the 'developer' and the relevance of the educational materials. This also reveals a lack of understanding about the respective roles of academic staff and content developers. At the University of Northampton, there is no separate group of content developers, as this comment implies. Instead, a more integrated model has been adopted where academic staff have the agency to create their own

materials. This model encourages long term academic staff development, providing staff with full agency and control over materials. However, it also runs the risk that, in the interim while staff are being upskilled in the use of technology, software and other tools are not being used to their full pedagogical capacity. This makes it very difficult to extrapolate from a student perspective what is actually a constraint in the tool itself and its software development (not something that academic staff can control) and the way the tool is implemented by the staff.

Some students who initially answered in the negative regarding the visual design of the VLE, when asked to further qualify their reasons for their responses indicated that in fact it was having an impact. Interestingly, they only recognised the impact after the course of some considerable conversation:

> S: "I know it is supposed to look professional and stuff but it is all khaki green, brown and grey.
> F: So now we are saying that the visual does matter?
> S: Yeah this is the thing. It is….
> F: The effect it creates…
> S: Yeah it does."

When asked to consciously reflect on the visual appearance, students considered it to be more important than they had previously thought. This suggests that the design does matter but on a subconscious or subliminal level. The ambiguity in students' responses and concerns around visual design may indicate that it is not an issue of primary importance to students. Indeed, issues of visual design are not particularly prominent in the literature to date. However, the appearance of the VLE may cause students to make implicit judgements of an activity, the teaching staff, the module or the institution as a whole in relation to its modernity, competence and relevance. These results suggest a hierarchy of needs in terms of VLE design where issues of usability and navigation are essential for students to access online tasks as a precursor to engagement, and issues of aesthetics enhance the experience and shape students' subliminal perceptions.

Students identified fewer uses of the VLE than expected, given what its functionality permits. Predominantly students engage with the VLE for the purposes of submission of assignments and as a repository for materials to refer back to.

> S: "I think we just literally just focus on the fact the file hosting and submitting work, they should be the only two things you get on there."

They did not perceive the VLE's primary purpose as being a place where active learning happens but rather as a repository for material. This suggests that its usage is limited by staff awareness, experience, or time and resources. Previous research, has found that the interactivity of tasks is a key factor for successful blended learning (Wu et al., 2010; Salmon, 2013; Singleton, 2013; Wong et al., 2014). In particular, where there is social contact and collaborative work with peers which generates a learning community, sustained student engagement is more likely (Swan, 2001; Sims et al, 2002; Rovai and Jorden, 2004; Morley, 2012; Salmon, 2013; Singleton, 2013; Sheffield et al., 2015). This suggests that we still have some way to go in helping students to understand the benefits and value of blended learning and in moving staff usage of the VLE from principally being a repository for PowerPoints and lecture notes and towards somewhere that is a collaborative peer learning site. Even in its purpose solely as a repository for information, students identified difficulties when locating tasks. They struggled with the module folder structure, remembering which module e-tivities belonged to and where to find them.

S: “a lot of people have problems figuring out which heading it is under! Like… Which module is this? It’s like finding whichever module it is, clicking on it and then going to the activity!”
S: “As far as it will be good to access files relevant to the course like at least seven different key strokes or something like that just feels so… tired.”

Creating a logical hierarchy within the folder structures of a module and making the online learning tasks easily accessible within the smallest amount of clicks possible is, therefore, likely to increase engagement. Not surprisingly, those students who found that their NILE sites were clearly structured reported using NILE more regularly:

S: “...It’s quite good that I can go on to NILE and look back on all the announcements and everything and see what’s going on with each of the different modules and it’s all very clearly laid out so I quite like that because I am really organised so I like to have that structure it makes things run smoother.”

It is of course difficult to establish whether this perception of clarity is subjective and particular to individual students, or a function of the actual organisation of NILE sites. It does suggest, however, that staff may find it useful to check in with students about how the organisation of files and course materials is working for them.

In addition, participants were unclear on the purpose of the VLE, and therefore it was difficult to assess whether students’ perceived it to function effectively. Such confusion was compounded by a lack of experience with equivalent online platforms in previous education:

S: “I know in my first year of using it, I never went on it, because I was just like I don’t know how it works. I don’t know what I am doing and don’t know what any of this means.”

But it is striking in this extract that the technical aspects of the student’s digital literacy - ‘I don’t know how this works’ - is linked to the conceptual aspect - ‘I don’t know what any of this means’. This re-iterates the importance of articulating the purpose, utility and point of online learning tasks, as highlighted above.

Where students had used similar platforms in other educational contexts, they were able to more easily evaluate the VLE, but tended to highlight missing functions they had previously used. For example:

S: “when I was at college we had sort of the same thing but it was called blackboard there was a section which is really useful ‘cause you could look at your studentship so you could basically see like...had your grades in one area had like attendance had like, you know, personal information that you needed to have and what you needed the tutors to know have on there…”

Experience with learning tools has been established as an important factor for successful blended learning (Lim et al., 2006; Henrie et al., 2015; Wong et al., 2014). Where students either have previous experience with VLE or particular learning tools, they are more positive towards the idea of blended

learning. In addition, students who take the time to explore and experiment with learning tools typically engage more successfully in the tasks (Henrie et al., 2015).

Also, unintentionally this student has further highlighted the difficulty of extrapolating constrictions of content development from the application of that technology at an institution or by a particular academic. Ironically here, the student had previously had a positive experience of Blackboard under a previous institution and was lauding its capabilities, failing to realise that it is exactly the same software that underpins NILE. This shows that the way that we as an institution or as individual academics are using this software has, for this student, been a very different experience. Later the students even discussed whether they could persuade the institution to purchase Blackboard:

S: "I wonder if a product like Blackboard is cheaper than running the NILE system."

It is clearly beyond the realms of staff or institutional capacity to seek to legislate or control effectively for students' previous experience with educational technology. It is, however, possible and necessary for institutions to establish a VLE which operates on familiar principles, and embeds support and training for staff and students into existing programmes. Where students are required to use particular learning tools within their courses, support must be provided in subject and ideally module specific contexts. Effectively communicating the reasons for using a VLE, for adopting blended learning as an approach to teaching and learning, and establishing a safe environment for both experimentation and failure would help to enhance engagement for both staff and students.

Below, the issue of digital literacy of students and its impact on engagement will be further developed.

2) Factors impacting engagement with blended learning

In addition to the conditions outlined above, student engagement with blended learning was also impacted by a number of factors which fall into roughly three categories. The first category pertains to issues of student digital literacy and technology preferences, including the use of technology in relation to blended learning. A second group of factors can be summarised as being connected to individual student beliefs and motivations in relation to learning and academic performance. Finally, a set of factors related to students capacity to self-manage and self-regulate; students with a higher level of intrinsic motivation and internal locus of control had significantly greater self-management strategies in place and therefore, responded more adeptly to blended learning approaches. All of these factors can be addressed by good teaching practice; as teachers we can support the development of digital literacy, we can positively influence student beliefs about technology and their own learning and we can support students development of self-management strategies but ultimately there will always be a level of variation in the student body and differentiation required. In addition, students can and should have agency within these areas.

2a) Digital Literacy and Technology Preferences

Technology was sometimes criticised by students whose negative attitude was simply expressed without further reasoning:

S: “I hate technology, I don’t get on with it very well.”
S: “I don’t particularly like doing things online.”
S: “Yeah I am a massive technophobe!”

It is perhaps worth noting that some of these sentiments were expressed by more mature students in practical, hands-on courses. It is possible that age and discipline may impact these views. Unfortunately, we were unable to recruit any participants from courses which use technology more intensively and might be expected to express more positive views. Nevertheless, in light of frequently held assumptions about university students and technology, this is a useful reminder of the diversity of the student body and their views.

Others felt that challenges in online assignment submission or formatting work limited their potential. Online submission appeared to be rather a matter of trust in technology; many students claimed they feel insecure about the process of submitting online:

S: “I submitted the essay and then I thought the file was quite small like 37 KB and I thought It’s not right is it?”
S: “I didn’t like using the submit button though! I would just stare at it thinking has it got through?! So scary!”

Those trust issues potentially link back to the aforementioned conditions for blended learning as it indicates gaps in communication and explanation of processes between staff and students. However, the fear associated with online submission appears to diminish over time: once students have experienced online submission positively, their confidence increases. For first year students who have never used an online submission portal, however, it represents a significant source of uncertainty and stress. It may therefore be useful for staff to offer students a test run or early formative submission using the same processes to offer low-stakes experience and assurances.

Many students faced challenges in fulfilling the implicit digital skills required for their assessments in terms of presentation, formatting and document preparation before online submission.

S: “I spent a lot of time on this essay and now there’s a paragraph which has been flipped round and its usability isn’t just uhh.”
S: “But then yesterday when I submitted the essay, it just takes the document, the word document and sort of transfer it from your word document straight to the (software).”
S: “My word count says one thing on my word document, and then on Turnitin went down.”
S: “The reason why I don’t like it [online submission] is ‘cause the software is not that great.”

These extracts suggest that students do not understand how the software they are using works, or why certain things change in conversion between different programmes. Even programmes that are considered to be ubiquitous such as word processing or basic photo editing were areas of uncertainty. Students may therefore rely on familiar, not to say outdated, technologies:

S: “No all about IE (Internet Explorer)! Old school! I am like an old lady with computers…!
S: I can imagine you still doing the dial up thing (imitates dial up tone).

S: I know google, YouTube, word and mine sweeper and paint."

In addition to concerns around digital submission from a practical point of view, some of the participants questioned the institution's decision to make digital submission the default mechanism. Students explained that choosing whether to submit in hard copy or online would contribute to better quality of work and emotional well-being:

> S: "I think if we had both options... if both options were there and we could do both then I'd probably do both 'cause there is that kind of security that is online and been sent that sorta stuff and documents can go missing and stuff, but I think the option should be allowed still and everything's moved forward with technology but you know, it's still academia.
> S: Yeah, I like that we have the option to submit things not in paper a paper form….
> S: We don't even have the option – you have to submit it online. We can't turn up to [staff name removed] and be like I wanna do mine [by hard copy]"

> S: "I think if I had the option of handing a paper I will hand a paper. Or a bit of both but ...
> F: And why is that?
> S: I think I trust myself… more the fact that it is definitely handed in. With the electronics it is so … dunno… it can just not turn up."

Still, it is clear from these comments that the desire for 'choice' is primarily based on mistrust in the online submission tools. It is unclear why there is this level of mistrust given that in general the software is highly reliable. It is the case that more complex assignments such as portfolios may be difficult to submit and maintain formatting, but the majority of assessment formats are handled well by the software. This perhaps reflects a need for greater communication around students' concerns, explaining how they can check that submissions have been successful and providing reassurance.

All of the evidence provided in this particular factor indicates significant insecurity around use of technology (Sun et al., 2008; Wu et al., 2010; Singleton, 2013). Such a lack of confidence obviously acts as a barrier to engagement with blended learning:

> S: "I think like we said like being wobbly with the technology…"

It would seem that some students lack the digital literacy necessary to engage with essential, fundamental institutional processes, such as assessment submission which is now almost entirely an online process, bar specific exemptions such as sketchbooks. This undermines assumptions often made about generations of students as 'digital natives' (Prensky, 2001), suggesting that this term is not particularly helpful in characterising skill levels (JISC, 2016). This also suggests a significant breakdown between students and the support provided by the University. Despite specific technical and resource inductions and support staff teams on site available for students, there is clearly still a lag in the development of these digital skills. This may be because as yet digital skills are not fully or consistently embedded within the curriculum. It is possible that this, in part, explains the negative response to blended learning.

In contrast, some students expressed positive attitudes towards different online resources and evaluated them as a useful tool part of their technology preferences. Among the available online resources is NELSON, a search tool for the digital library resources and databases, which received good feedback because of its simplicity and clear design:

S: “I really like NELSON. Just for the record...great tool.”

S: “[…] we do praise NELSON – we think NELSON works very well um… it is basic, it is simple but it works you know.
S: Yeah, you know NELSON is a very effective search engine.
S: Yeah… it works”

S: “It turns up the results that you are looking for, most of the time, you can filter it quite easily.”

It is perhaps worth noting that the tool works on a familiar model: that of the search engine. The VLE, however, works on a less familiar model relying on students’ understanding of programme and module structure.

Once students gain familiarity with the VLE and learning tasks, and have been supported with its use, they exhibited an increase in confidence:

S: “once you get the hang of it, it is so easy isn’t it?”

Familiarity and experience with learning tools and the VLE breed engagement (Lim et al., 2006; Henrie et al., 2015; Wong et al., 2014).

Students also acknowledged some of the benefits of the available VLE which dominated their technology preferences. Some of them found it a supportive resource which can offer different activities and materials:

S: “It is easily understandable and there's always options you can click on to tell you how to do things especially on NILE if you're confused there’s always a video.
S: Yeah if you click that it says it has like assessment details and then it says assessments so you have to click on that all module activities.
S: Or even power points and things like that.
S: And for the contact information for the lecturers so it’s very easy.
S: And then you have obviously submit your work and then the feedback button.”

From those comments, students appear to value accessibility, efficiency and simplicity in technology:

F: “If you have more things online? Because we have this argument going through all -
S: Yeah because you could probably keep referring back to it.
F: Yeah that was a benefit as well that it’s always there online for you.
S: Yeah if it’s online
S: Especially if you can do it on your phone.”

S: “But that’s the simplest part of the whole website.
S: Yeah… works well.”

These comments in a sense suggest again a lack of digital literacy amongst some of the students, which is why the simplest approach is preferred. To ensure student engagement, simplicity and clarity of design and task instructions are key to mitigate this lack (Lopez-Perez, et al. 2011; Salmon, 2013; Henrie et al., 2015). Effective pedagogical design of tasks has been found to be key in previous research (Swan, 2001; Mayes and de Freitas, 2004; Rovai and Jorden, 2004; Kennedy and Newcombe, 2011; Powell et al., 2015). In the absence of deeper knowledge about software and processes, and confidence in using them, students rely on simple and clear approaches. Where navigating complex file structures, multiple applications and unknown software, students may opt out instead, conserving their intellectual and emotional resources.

2b) Beliefs and Motivations

Students operate in a complex network of evaluation and appreciation of the benefits of blended learning. This network connects to concepts of learning, environment and its effect on students’ academic progress, and emotional well-being.

Some explained engagement in online learning with reference to learning styles:

> S: “It depends on the type of learner you are and the type of activity you are interested in. So you are not going to get the people who are kinaesthetic learners on the practical courses.”

This was also associated with the idea that engagement with blended learning reflected “personal preferences.” Therefore, it was suggested that blended learning

> S: “Could be a choice? It will suit some people’s learning skills but not others and it should be a choice rather than compulsory.”

Given the emerging body of research which undermines the construct of a fixed, single learning style for each individual, it is interesting that this concept is still prevalent among students. Indeed, it appears that it is still a component of some university courses. The problem is that when the learning styles framework is combined with choice as an inherent good, the conclusion is that students may feel they have an opt-out clause:

> S: “It’s all down to individual differences isn’t it, and motivation.”

Such an attitude would not encourage intellectual flexibility or the development of a range of learning approaches. Nor is it sustainable for an institution or lecturer to offer a wide range of choices for all learning styles and preferences.

Sources of motivation were thus often connected to the perceived importance of the task. Firstly, whether the task was compulsory (by which the students seemed to mean assessed) or not impacted engagement:

> S: "I have to do the e-activities anyways no matter what […]"
> S: "I do think that the equally if you've got to do it you just got to do it."

Compulsory e-tivities certainly appeared to indicate increased engagement - unsurprisingly. However, the responses on this issue were markedly varied which makes a good practice recommendation very difficult. For some student groups, motivation was entirely bound up with the notion of compulsory (assessed) tasks, while for others, it was tied to expectation and trust in the tutor (see above). If they had been told it was valuable and they believed this, they would complete it regardless of whether it was linked to assessment or not, as in the student's quote mentioned above in section 1a:

> S: "For me, I just do it anyway even if it's not compulsory I'm probably going to do it because there's a good reason someone has set it up."

In both these understandings, individual motivation was seen as irrelevant. Interestingly, these students did not seem to consider that some students will still choose not to engage even when compulsory (assessed) or expected. This suggests that the norm among these particular student groups is completion, whereas non-submission may be more typical in other groups. This possibly indicates that group dynamic can instil particular engagement patterns.

Others demonstrated a degree of intrinsic motivation:

> S: "It's just more information and then you learn more."

For some students, it was a point of professionalism that they engaged systematically with all learning opportunities. For others, the decision about engaging in the e-tivity was mediated by a number of factors. Firstly, feedback on the e-tivities seems to be vital for most students and it impacts their personal motivation. Without it, the e-tivities are not recognised as beneficial to learning.

> S: "Mmm yeah if there were some feedback yeah otherwise we can't really learn from it and then improve on it."

In this discussion of traditional 'red pen' feedback on paper-based work, students clearly value the comments from the tutor:

> S: "That was quite handy when it was like, don't use that phrase or you should have paragraph here I know its university and they think we should be there already but you -
> S: You know it's been read and been interacted with.
> S: As well as, if this is a piece of writing you're particularly proud of and you might wanna take forward and use somewhere else then you're getting a review of how to do it"

It was clear that the perceived importance of the task determined engagement:

> S: “If I think it is going to benefit me then I will do it”.

Our student-researchers emphasised here the importance of trust in the tutor (see above re staff engagement): if the importance is not immediately clear, this can be outweighed if the students trust the tutor to make it clear later. If this rapport has not yet been established, or the tutor has previously not followed through on tasks set or chased up non-completion, clearly identifying the benefits to the students is essential to encourage engagement.

Conversely, where this was not clear, students were less likely to engage:

> S: “I think the way they came across like e-tivities they just don’t seem important”.
> S: “Because I don’t think it is always clear what the benefits are”

Students were clear that engagement was likely to be lower where the importance and benefits of the task were not clear and transparent. In some senses, simply noticing that students had not completed something may be adequate. But where students feel that their work is not valuable or being valued, they are unlikely to continue, preferring to invest their time and energy into assessed work.

There is a strong preference for learning tasks which are interactive and responsive, speaking to a desire for increased contact with tutors and classmates:

> S: “I think the group thing is good, if you have people around you, you can talk, and you get other ideas.”
> S: “I think it would be quite nice to have a universal group we are all a part of anyway because it [art] is all quite individual based if it was all interlinked on one platform that would be quite nice.”

However, it is the face-to-face contact which is valued and seen as interactive:

> S: “Face to face is easier. Can't beat it.”
> S: “One-to-one those are the things that actually matter.”
> S: “It’s much better having someone in the room with you.”

Online tasks which are not interactive are seen to be of less value:

> S: “you are just doing your own research you are not being taught anything you are just reading something which I can do without being on a course”
> S: “(pressing) buttons to get certificate at the end! ...didn’t get anything from it.”

There is an implicit juxtaposition between either interaction, which means face-to-face, or passive online learning tasks, such as reading:

S: “if you compare the two as in doing something online where you are just learning going through a PowerPoint or whatever and someone in the room going through the PowerPoint with you.”

This suggests that the majority of online learning tasks currently being presented to the students who participated in this research do not maximise the potential uses of the VLE for interactive learning. Most students referred in their discussions to accessing reading materials, PowerPoints, or guidance notes. Very few highlighted more interactive tasks and tools such as feedback or comments on blogs, reflective journals, discussion boards, or structured tutorials. This entrenches the deep-seated view of traditional learning environments, in a personal face-to-face physical context, as superior to online environments. Thus, some students believe that

S: “It [the VLE] is not a proper learning environment.”

This represents a fundamental challenge of perception to address prior to Waterside in supporting students to view multiple learning spaces and environments as part of the learning process.

In sum, participants stated that engagement was likely to be higher for compulsory tasks, or where they saw a clear benefit, trusted the tutor, or were strongly intrinsically motivated.

2c) Self-management

At times, students associated engagement in online tasks with managing their emotions, energy levels and time. The theme of distress and anxiety in particular around issues of time-management and assignment submission has been explicitly identified by participants:

S: “It makes me feel stressed out, this puts me off that plus the fact it is on a computer and that scares me!”
S: “yeah coz I got so stressed out with that whole exhibition thing, even going onto the google account like it was just so confusing, I couldn’t access everything […]”.

In response to this anxiety, some students explained that they made deliberate choices regarding their approach to learning.

S: “If I think it is going to benefit me then I will do it but if I don’t then I won’t because I don’t want to put any added pressure on myself or stress out anymore and have more work to do.”

Some also discussed the control they exert over their environment, as it impacted their approach to blended learning. For instance, some expressed need for distractions in order to achieve the needed level of inner comfort:

S: “I personally like having the TV on in the background, but I put like some just so it's background noise so it’s not too silent.”
S: “Silence is more distracting for me, it makes me fidgety… only when I am anxious though.”

Others, however, found comfort in the absence of external stimuli:

> S: "I quite like it because it's like some days, like if I am having an anxious day I want to be in a cold room, wrapped up and really quiet sound or even sometimes nothing at all so I can focus better."

These extracts highlight the pressure felt by many students in higher education and potential consequences for mental health. Not engaging with blended learning may be viewed in this light as a way of reducing this strain, or potentially as an early warning sign for staff.

In essence, all groups recognised the individuality and personal nature of such decisions and refrained from making generalisations about 'best approaches':

> S: "If they like noise they'll go somewhere noisy, if they like quiet they'll go somewhere quiet

This presents a useful reminder that generalisations about students' study habits and behaviour are not always useful. These extracts also highlight the deliberate and thoughtful intent behind their choices: these students are actively reflecting on their own emotional state, and the impact this has on their study, and are designing their environment to accommodate these. However, in combination with the stress caused by uncertainty and unfamiliarity with new technologies, this appears to suggest a lack of resilience to challenge, capacity to adapt and cope with the unknown. Students gave the impression of navigating very complex worlds and uncertain futures, and of being reluctant to engage with learning tasks which presented further challenges or obstacles.

Issues around time-management in engagement in online learning tasks occurred in many of the focus groups. In some cases, e-learning was seen as positive:

> S: "And make it an e-activity and your lecturer can be like this is helpful and you do it if you want to do it and you benefit but if you don't…Rather than a lecture on it because it's more time-consuming."

In this case, the student appears to view the e-tivity as a time-saver, relative to a lecture. However, some students considered that this time saved was a detriment to their learning:

> F: So you have less time in class?
> S: Well no but that's not a benefit…

This suggests that although blended learning is seen as time-efficient, this is construed as detracting from time in class, which is seen as more valuable.

For other students, online learning constituted a time management issue:

> S: "It is hard to schedule… like you can schedule having to come here whereas online it's not…you can do it tomorrow and it's still there…"

For some, engagement in the online tasks was prohibited by their timing in terms of the rest of the programme:

> S: “I can’t really remember ‘cause at the time it happened I was working on one of our main projects and it didn’t seem as an important and I kinda left it for a bit and then forgot about it.”

This has implications for the design and planning of online components of blended learning, as students were unsurprisingly quite clear in their prioritisation of assessed over unassessed work.

Recommendations:

We recommend that staff seek to always provide clear, timely and limited communication to students, especially regarding what the e-tivities or online activities are, where to find them, how to complete them and why. As much as possible, listen to students regarding the organisation of NILE sites and methods of communication that they prefer, this may change from group to group so be prepared to be flexible in your approach.

Design interactive blended learning tasks which clearly link to face-to-face delivery. Offer support for these tasks in the classroom and provide support and feedback mechanisms. Establish trust with students, for example by providing that feedback or follow-through on e-tivities to stated time scales and setup low-stakes trial runs for new assessment submission processes.

Talk openly and transparently about your teaching methods by providing clear explanations about: blended learning (what it means and why); the e-tivities/ online activities and their place in the curriculum; the design, timing, content and benefits of each task and be clear whether and why tasks are compulsory.

Plan e-tivities such that students have low levels of stress i.e. at suitable times in the academic calendar, considering the programme level, sufficient time available and control over their environment.

Conclusions

We acknowledge that this research is small-scale and the results can only be considered indicative and preliminary. Although the participants collectively represent a spread of disciplines and courses, naturally not all courses are included. It may appear that there is a bias in terms of representing the negative aspects of student engagement. This is a function both of what participants chose to discuss in the focus groups and of our aims. The aim of this report is to contribute to improving practice in designing blended learning, and this entails a degree of emphasis on the negative, in order to help address commonly experienced issues in student engagement.

Our analysis suggests that student engagement in blended learning is shaped by fundamental conditions, and more personal factors. Essential conditions include staff engagement and digital literacy, effective communication, a well-designed VLE and online learning tasks. These conditions need to be addressed through institutional and staff action. Personal factors include students' attitudes and preferences towards technology which is shaped by prior experiences, beliefs and motivations about blended learning, and their management of their own emotions and time.

Students' feedback was often contradictory, sometimes self-contradictory. Indeed, whilst students were able to clearly identify what they did not like in terms of blended learning, they were often unable to state why or what improvements would help. There appears to be an underlying assumption that learning should be both easy and enjoyable, and that where challenges are presented, these are viewed as unequivocally negative rather than a learning opportunity. This suggests a lack of resilience in learning. Such attitudes are challenging to alter, but it suggests a need to tackle beliefs about learning explicitly with students, perhaps in the first year and continually thereafter.

This study has also demonstrated the inconsistency in approaches to introducing blended learning. The predominance of online submission and accessing resources hosted on NILE as the two key functions suggest that the possibilities for blended learning are not being consistently exploited across the University.

More broadly, it is essential to engage in a wide-ranging attempt to shift students' perceptions away from a traditional, conservative model of 'teaching' where 'interaction' necessarily and uniquely occurs in face-to-face classroom settings. Doing so requires open conversations and clear statements of pedagogical principles and values around both active and blended learning, which allows discussion of what constitutes 'interaction'. A fundamental shift in both practice and perception is needed to ensure that students neither view nor use the VLE exclusively as a repository for content and assignment submission portal. Instead, we should promote a view of the VLE as an intrinsic, valued component of the overall higher education learning environment because it facilitates different types of learning. Where staff view blended learning as a necessary evil, or as an ideological or cost-saving exercise, student engagement is unlikely to be either high or meaningful.

Successfully achieving this shift relies on addressing students' beliefs about learning and studying, and their real motivations for doing so, rather than an idealised vision of 'the perfect student'. There is a need, therefore, to encourage student belief in flexible, changing, multiple learning preferences (not fixed learning styles), development of their intrinsic motivation and resilience in learning. It also relies on a realistic evaluation of students' and staff digital skills and literature, recognising individual and group variation, and adapting practices and approaches to respond to these. Finally, building meaningful relationships based on trust between staff, students and the institution is also essential to the success of ABL.

Further research is being undertaken to offer a more representative view into the factors and conditions affecting student engagement at the University of Northampton.

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