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Student Transitions to Blended Learning: An Institutional Case Study

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ABSTRACT

This paper examines the experiences of students transitioning to blended learning in the University of Glasgow as part of the QAA Enhancement Themes work on Student Transitions. We draw here on exploratory, qualitative research to examine the benefits, challenges and skills developed by students during transitions to blended learning as a means of advancing understanding, and informing future curriculum design. Data from home undergraduate and international postgraduate students were collected over two years through focus groups, individual interviews and end-of-course quality assurance surveys. We found that while home/undergraduate and international/postgraduate students have similar transition experiences, international taught postgraduates encounter additional challenges in terms of acclimatising to UK higher education (HE), especially within shorter programmes of study and where pedagogical and language differences exist. The findings are integrated in a conceptual framework highlighting the importance of access, acculturation (attitudes) and attributes (skills) to enable learner autonomy to engage effectively in blended learning. The findings have implications for institutional infrastructure, curriculum design and learner development. Further research is required to collect a larger data set as a means of developing the study's conceptual framework, in order to better understand and support diverse student transitions to blended learning.

Keywords: student transitions; blended learning; digital education; learner experience research; case study

Introduction

There is an increased awareness of the importance of blended learning in the higher education sector (Garrison & Vaughan, 2008), especially as the changing digital landscape continues to shape learning and teaching. Blended learning is commonly defined as a combination of face-to-face learning with technology-based or online learning (Driscoll, 2002; Garrison & Kanuka, 2004; Graham, Woodfield, & Harrison, 2013). We subscribe to Garrison and Kanuka's (2004) definition of blended learning, where the two components are optimally integrated to make the most effective use of both modes of study. There is a general expectation among today's students that technology-enhanced learning will be an integral part of university experience and that they will need to adapt to this new approach of learning (Beetham, White, & Wild, 2013; Dzakiria, Mustafa, & Bakar, 2006). This adaptation is not only relevant in gaining knowledge and learning skills, but also has implications for future career prospects (Concannon, Flynn, & Campbell, 2005) in terms of social and digital literacies. For teachers, developing an effective approach to blended learning requires relevant skills and experience in designing and facilitating blended learning opportunities (Dzakiria et al., 2006), informed by a good understanding of students' experiences (Carswell, Thomas, Petre, Price, & Richards, 2000). This is perhaps one reason Dzakiria et al. (2006) called for teachers to have an in-depth understanding of learners' needs and additional skills and experiences when facilitating, designing and building the learning systems and support mechanisms that encourage blended learning.

A review of the literature over the past 15 years reveals several perspectives on students' experiences of blended learning (Concannon et al., 2005; Cramphorn, 2004; Garner & Rouse, 2016; Stacey & Gerbic, 2006). For example, Cramphorn (2004) found that psychological factors, lack of social cues and time management may all act as opportunities or barriers to student participation in blended learning. Concannon et al. (2005) noted that students' attitudes to computers, study patterns and future career plans may either enhance or inhibit student use of information and communication technology (ICT). Blended learning was also linked to a higher level of student engagement (Stacey & Gerbic, 2006) and self-regulated learning (Smyth, Houghton, Cooney, & Casey, 2012), and was seen to provide flexible access to learning resources with the added advantage of allowing students time to review composed thoughts, making reflection a part of the learning process (Salmon, 2004). Communication related benefits have also been recorded, especially for international students with English as a second language (Thompson & Ku, 2005). There is the argument that blended learning presents fewer language barriers and resolves the problem of speed and accent in conversations (Ku & Lohr, 2003; Stacey & Gerbic, 2006). Other studies point to the benefit of developing social and digital literacies that will be useful in virtual team working (Clark & Gibb, 2006; Dineen, 2005; Olson-Buchanan, Rechner, Sanchez, & Schmidtke, 2007).

Despite the benefits and opportunities brought about by blended learning, growing interest in this form of learning and teaching has also served to make its limitations more apparent. For example, Owston, York, and Murtha (2013) raised concerns as to whether blended learning is suitable for all students: the study found that higher achieving students were most satisfied with blended learning and preferred this method to a face-to-face class in terms of convenience, engagement, and effectiveness of learning. Low achievers

were observed to need the additional structure found in the traditional face-to-face class as they lacked the independent study skills required for blended learning. Lam (2015) argued that learning autonomy is key for students to succeed in blended learning. Another area of caution relates to students worrying about spelling and grammatical errors, which could be a distraction to learning and engagement (Thompson & Ku, 2005). Concerns have also been raised around technology invading personal time and space (Smyth et al., 2012), that may bring about stress and information overload, difficulty adjusting to the structure of online courses, lack of time management and self-motivation (Marino, 2000, cited in Tsai, Shen, & Tsai, 2011). Other challenges include intermittent technical problems (Concannon et al., 2005), limited interactions and differences in learning orientation (Dzakiria et al., 2006), and social barriers such as a lack of confidence to publically participate in online forums (Cramphorn, 2004).

While such studies have explored student experiences of blended learning generally, relatively little attention has been given to the similarities and differences that exist between different cohorts of students. One study, by Ku and Lohr (2003), found similarities between Chinese and American students' attitudes toward online learning. While the American students reported feelings of isolation and frustration over a lack of oral or verbal communication, they acknowledged the benefits of learning flexibility in terms of pace, space (no travelling required) and the ability to reflect upon written thought. Chinese students shared similar experiences but encountered additional challenges due to differences in cultural values, language and approaches to learning. However, Chinese students expressed more confidence in their communication, feeling empowered due to the opportunity to reflect on their compositions prior to posting them online. This is important from the perspective of the substantially growing numbers of international students studying in UK HE (UKCISA, no date), and the fact that students are not homogenous but differ in expectations and experiences of UK HE learning and teaching. Consequently, there is a need to better understand how students vary in their expectations and experiences of blended learning, given the increased emphasis on technology-enhanced learning in HEIs (Gordon, 2014) and increasing number of international students in UK HE.

Research at the University of Glasgow

The University of Glasgow (UofG) launched three rounds of investment in blended and online learning development (known as the BOLD project). Drawing on support from QAA Scotland, we explored student and staff experiences of this online provision. This particular study comprised a number of pragmatic questions that relate to the student experience, influenced by our own and others' work on student transitions. Focusing specifically on blended (rather than fully online) programmes, we explored student expectations, perceived benefits and challenges with online provision, and skills required/developed during the transition to blended learning. Staff perspectives on transitions to blended learning are explored in a separate paper (Adekola, Dale, & Gardiner, in review).

Methodology

Although we have a number of students engaged in blended learning courses, this was a small, exploratory study (akin to a pilot study). In order to include undergraduate (UG) and postgraduate taught (PGT), as well as home (H) and international (I) students, we drew on a purposive sample of students (Cohen, Manion, & Morrison, 2000), by approaching students on three courses across three of our academic Colleges who were newly introducing blended approaches. Sampling was also opportunistic (Cohen et al., 2000) as we relied on volunteers. We found that PGT students were more responsive to invitations than UG students, and thus relied on secondary data from quality assurance surveys to capture UG student input, although we did have an opportunity to add specific open questions to the end-of-course surveys to align with the study. These included students' motivations to engage in a blended course/programme and their expectations, perceived benefits and challenges/barriers, support needs, and skills developed. Ethical approval for the study was sought from and granted by the UofG's College of Social Sciences' Research Ethics Committee.

Our approach presents several methodological challenges in terms of response rates, comparability of cohorts, and the nature of the data and its fit with our research questions. However, as a small scale, initial study, we believe the approach offers insights as long as the methodological aspects are understood. We make no attempt at generalisability within the programmes and the UofG generally, nor to wider audiences, and offer this work as a case study that has the potential to inform other institutions about the diverse experiences of students transitioning to blended learning. The study does not make any epistemological/ontological assumptions other than being post-positive or interpretivist in design, valuing the perceptions and experiences of individual participants.

Courses were delivered through a dedicated Moodle course that included online discussion forums, videos, quizzes, homework and collaborative activities. School B additionally made use of Aropa for online peer assessment. As all UofG students use Moodle to support their learning on traditional face-to-face courses, the notable difference with the blended courses is that the predominant medium of delivery and much of the interaction differs, albeit that the technology itself will be familiar.

Data collection

In session 2014/15, students were recruited from a blended postgraduate course in School A (cohort size = 269). In session 2015/16, students were recruited from four online undergraduate classics courses in School B (total cohort size = 31), and additional home-based and international participants were recruited from a blended postgraduate course in School C (cohort size = 67). Participants from Schools A, B and C (which are in different Colleges) are shown in Table 1.

Student Cohort	School A: (international postgraduates)	School B: (home undergraduates)	School C: (home/ international postgraduates)	Total
Method of data collection used	Focus group	End-of-course quality assurance survey*	Individual interview	
No. of participants (2014/15)	9			9
No. of participants (2015/16)		12	3	15
Total				24

Table 1: Participants recruited to the study.

Data analysis

Data were collected through focus groups and interviews, undertaken and audio-recorded by author JA, and professionally transcribed, with JA verifying the accuracy of the transcripts. Data from the quality assurance end-of course online surveys were extracted verbatim. The data were independently analysed by two researchers (JA and VHD), using an inductive approach to thematic analysis as defined by Braun & Clarke (2006). It should be noted that only PGT students contributed to the interview/focus groups so the quotes reflect their perspectives primarily.

Thematic analysis from an inductive perspective involved first reading the transcripts and survey data through fully, then identifying codes to represent meaningful responses, grouping the codes into categories, and then reflecting on overall themes. Two researchers (JA and VHD) negotiated the final coding outcome, by reviewing transcripts against the two proposed coding systems, and coming to an agreement regarding the wording we had each used to code particular responses. The overall themes reflect the original questions around students' expectations, benefits, challenges and skills developed. Due to brevity we excluded participants' responses around their motivations to engage in blended learning, since for some cohorts there was no choice, and also support needs, as these are considered in the context of the conceptual model.

Results

Expectations of blended learning

It was clear from all cohorts that students typically expected that blended learning would be easy to use, accessible, and that most study involves some degree of online engagement; as one explained:

Yeah, I think it's a new way. And I think this way is penetrating the education system, so we can't say no to the distance learning or the video. We can't say that, we have to accept it. (I/PGT).

They also expected to have the same "ease of contact with teachers" (H/UG) as they would in a face-to-face setting. Categories emerging in relation to expectations were convenience and flexibility in learning, equivalence of experience, and normalisation of online learning.

Benefits

Participants were positive about the opportunities and actual convenience brought about by a blended approach in terms of affording them flexibility and control over their learning. Other reported benefits were that blended learning encouraged independent learning, the blended course was easy to use, it was easier to ask questions online, there was the potential for peer learning using forums, and there was an emphasis on active learning. Particularly notable was the sense that students experienced greater equity of participation:

Everyone contributes to seminar work rather than a few people doing all of the talking in a face-to-face seminar. (H/UG).

This is especially important as our international students previously reported difficulty contributing in face-to-face classes due to cultural and confidence issues (Fischbacher-Smith et al., 2015). It was encouraging, therefore, to hear students speak of feeling more confident and more independent in their learning:

^{*}Standard survey modified to include questions pertinent to this study.

We are shy and the teacher can be more active to us... he always chats with us. And maybe we will be more familiar. (I/PGT).

It makes you become more independent... This course can encourage us more to do the research yourself and if you don't understand it, you and ask about it with your tutor or with your classmate... (I/PGT).

Importantly though, as the last quote indicates, independence does not necessarily mean isolation, as students found themselves more confident engaging online. There was also some indication of improved digital literacies and learning literacies generally that we would wish to explore further:

I end up using internet, YouTube quite a lot when I'm studying on my own, just to get a better understanding of something, because books are wonderful, lectures are amazing, but sometimes, you could just come up with your own questions, the more you study, the more you think... (I/PGT).

Challenges

Commonly reported challenges for different student groups included time management, reduced face-to-face contact leading to a sense of loneliness, and technical issues that relate to access to material and quality of learning materials. A lack of input from others, or difficulty asking questions online, was also a challenge. It was particularly difficult for some students to feel that they had fully resolved their enquiry or their concern in an online environment, largely due to the inability to engage directly (or synchronously) with the lecturer or their peers:

Sometimes when you ask questions on the forum, like they haven't exactly answered what we want to... like to the point. Like they have gone round the bush but not exactly answered. (I/PGT).

Reliable access to learning materials was something that emerged across the cohorts. Understandably, where a course is online, any technical shortcomings such as intermittent Wi-Fi provision, resource links that have expired or poor quality of video become a challenge. International postgraduate students experienced additional difficulties associated with their transition to UK HE: adjusting to a new mode of learning that they had not anticipated, and questioning the rationale of online learning after having travelled to the UK for a face-to-face experience:

When [students] come to the UK, we try to feel the culture here, to try for the face-to-face communication, not just watch the online, or why come here? (I/PGT).

I/PGT students also expressed concern that they were ill equipped in terms of language to engage in a blended programme, even where prior experience existed, because they had to first translate the English term associated with a technology into their own language to discern what it is used for. This was particularly the case when using certain software packages:

You need to know English, because I swear, I think it would be really difficult to use some of the programs for international students when they were kind of like, I don't even know what that word is, you don't really know how to navigate things. (I/PGT).

Many of these points relate generally to transition into study in UK HE. It would seem here though, that while on the one hand there are benefits from online study in relation to independence, on the other hand there might be a corresponding lack of confidence and reduced sense of connection with study. Some students spoke of feeling "alone" and "lonely" because of the lack of face-to-face contact with teaching staff and other students:

Sometimes I feel alone because I want to discuss with my friend when we are having classes. But when I'm just watching those computer screens I feel lonely and helpless! (I/PGT).

Although an online environment might provide a safe place for students to prepare and ask questions, it is nonetheless not an anonymous space and so issues of saving face were still raised, with some students expressing reluctance to contribute in an online setting because of potential embarrassment.

Skills developed

According to the participants in this study, the most important skills they developed through engaging in a blended learning programme included readiness for online learning, digital literacies, time management, written communication and critical thinking skills. The latter is particularly significant given the research-led ethos of the UofG and the skills that we seek to embed from the very beginning of our programmes. International students readily reported greater independent learning, more insight into their own learning, and enhanced facility to do their own research. This suggests that the online setting provides them with the time, space and opportunity for reflection that they expressed they lack in other classroom settings; we might also reflect on what that means for the design of face-to-face teaching and learning. There is also a sense that students develop a better appreciation for the value that their peers bring to any learning situation (social literacies), as this international student explained:

I had an interesting experience, once I asked some questions and some other student told me the answers...and I started to learn. I feel stupid but I still continue to ask, I don't care. (I/PGT).

Where students do contribute more readily online, not only is the opportunity for peer learning greater than is perhaps achievable in a large class, but so too is their exposure to the range of possible approaches to any given learning 'problem':

Maybe your answer isn't wrong because critical evaluation, because we're not doing the mathematics, we're doing [social science], you have so many answers, so it doesn't matter. (I/PGT).

Discussion

This study sought to explore student transitions into blended learning. Within this, expectations, benefits, challenges, and the skills required to optimally engage in blended learning were identified. It is important to note that the design of our study and our interpretation of findings were informed by our review of literature over the last 15 years. As further research takes place within the sector, our recommendations are subject to change. Nevertheless, we believe the study offers useful guidance for teachers and institutions currently looking to better support student transitions into blended learning.

Students expected to use technology-enhanced learning approaches as part of their studies; this finding is consistent with Concannon et al. (2005) who found that e-learning was an expected part of the university experience. In relation to perceived benefits, students identified the opportunities and convenience brought about by the blended approach affording them flexibility and control over their learning in terms of space, pace and choice of learning strategies, again consistent with Concannon et al. (2005). Students also highlighted increased student participation, ease of communication and peer learning. For international students who have expressed communication difficulties due to lecturers' and students' pace of talking and accent (Fischbacher-Smith et al., 2015), the online environment offers a landscape potentially easier to navigate.

Challenges identified by some students included time management and a reduction in face-to-face contact, which created a sense of isolation and lack of immediate feedback. There were also concerns around technical issues. Some international students also felt that teachers assumed some prior knowledge, which raises the need to balance opportunities for independent learning against the need to meet student expectations for direct contact with their lecturers/tutors and peers. These findings align with those of other studies (Concannon et al., 2005; Smyth et al., 2012; Thompson & Ku, 2005; Marino, 2000, cited in Tsai et al., 2011). While most students experienced challenging transitions to blended learning, these appear to be compounded for international students. A recent scoping study into the transitions of international students to Scottish HEIs by Bell (2016) confirms that international students experience multiple transitions. In addition to the sociocultural and language transitions, Bell (2016) observed difficult transitions in terms of students' expectations of the academic environment and their assessment literacies, particularly for postgraduates from East and South East Asia. Unfortunately, the nature of our study design limits our ability to draw conclusions about the different student cohorts, but previous research undertaken in the University and the work referred to here by Bell (2016) and others does lend further weight to our observations that there are particular challenges for international students that might be heightened in an online setting.

The study also reveals that students require several essential skills to optimally engage in blended learning; these include time management, readiness for online learning, and digital and social literacies. Notably in this study, there was some evidence that the online environment created greater awareness and development of some of these skills. This initial insight poses several associated questions that we would intend to pursue in the future. This is due to the strategic importance of critical thinking, independent learning and the development of a range of skills that enhance student learning and employability.

One final point to note, although one we do not develop in this paper, was that some students believed that blended learning saves (teachers and the institution) money, and there was a potential tension for international students who were paying for a campus-based education but learning in an online environment. This shows that international student are conscious of the value they attribute to face-to-face teaching, relating it directly to the cost of tuition fees, and considering it potentially superior to online learning. These findings are consistent with work elsewhere (Smyth et al., 2012; Stacey & Gerbic, 2006). This may relate more to how we manage expectations and demonstrate the benefits of blended learning within a largely campus-based programme, than to the intrinsic value of blended learning and its relevance or place within a campus-based programme, but it is clear that the educational value of the approach needs to be better articulated to students.

A conceptual model of student transitions to blended learning

Reflecting on our findings, and revisiting the original transcripts, it became clear to us that success in blended learning was ultimately a function of four distinct aspects: access, acculturation (attitudes), attributes (skills) and autonomy. Access to the technology and online learning resources is a fundamental basic requirement that underpins blended learning. Only if students have access can they open their minds to the possibility of blended learning, their attitudes having been informed by previous educational experiences and preferences. Necessary attributes (skills) include digital and social literacies as outlined. Acculturation and attributes may inform each other, since acquiring new skills may influence students' attitudes, or their attitudes may underpin their potential to develop essential skills. Autonomy, the pinnacle of the model, relates to the need for students to have the confidence and competence to engage as independent, reflective learners (Owston et al., 2013), required for effective engagement in blended learning.

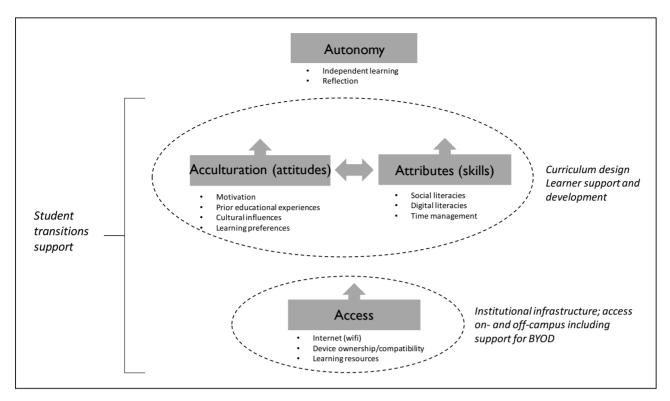


Figure 1: 4As in transitions to blended learning

From the study reported here, we suggest that access, attributes (skills) and acculturation (attitudes) directly influence students' autonomy as learners and are essential in an online environment. Conversely, a lack of access, attributes or acculturation will undermine autonomy, potentially leaving residual dissatisfaction with the learning experience and the University.

This conceptual model has some resonance with the pyramid model of digital literacy developed by Beetham and White (2010), cited in Jisc (2014). It too puts access as a foundation that underpins skills, practices (behaviours) and identity (similar to blended learner autonomy), although it focuses exclusively on digital literacies rather than a holistic consideration of blended learning.

Implications and conclusion

Readers (teachers, learning designers, senior administrators and heads of services) may wish to consider how they may apply the model within their own academic context. The issues raised around access emphasise the essential nature of a robust IT infrastructure, including support for BYOD (Bring Your Own Device). These findings are echoed in a separate paper that examines institutional and teacher transitions to blended learning (Adekola et al., submitted). In a literature review of student expectations of the digital learning environment, Beetham et al. (2013) also revealed that students expect Wi-Fi, power sockets, access to content through the institutional VLE (virtual learning environment), and support to bring any number of devices onto campus. These assumptions will increasingly be taken for granted within higher education, not least given the growing use of technology enhanced active learning spaces across the sector internationally (New Media Consortium, 2017).

In terms of curriculum design, teachers and support staff also need to be cognisant of the expectations and prior experiences of students transitioning into blended learning, to address the acculturation and attributes dimensions of the framework. While we believe that all learners should have access to induction and ongoing support for blended and online learning, this is a particularly relevant for international students, who have travelled to the UK for a face-to-face learning experience, having experienced a culturally different pedagogy. Consideration should also be given to when, and for how long, students should be exposed to an online course within a blended programme. In this study one semester was too short a time for international students to acclimatise to blended learning; spreading an online or blended course over a longer period of time might be one alternative, but irrespective of duration, it is essential to provide appropriate study skills support (Fischbacher-Smith et al., 2015). Bell (2016) provides a set of recommendations for supporting international students, to address issues of socio-cultural integration, English language ability, and academic expectations and integration respectively. This includes engaging with students pre-arrival, providing appropriate academic and advice on arrival, and providing staff with appropriate support to ease international student transitions; in this context, this requires academic development around blended learning and teaching as well. One aspect of this transition that is identified in the findings is that while some students clearly benefit from and flourish within the online environment, others do not. It is beyond the scope of the paper (and the data) to explore how to support students who do feel isolated and who disengage from online interactions, but we note it here as an area for further research and careful attention by institutions.

Our study has led to the proposal of a conceptual framework with four key elements of transition into blended learning, namely: access, attributes (skills), acculturation and autonomy. Each aspect has implications for institutional infrastructures, curriculum design, and student support and development. For example, reliable access to Wi-Fi is a basic requirement that institutions must consider, as well as student access to devices and learning materials. In relation to students' abilities or skills, teachers need to address the development of digital literacies and other essential attributes within the curriculum design. In terms of acculturation, institutions need to consider learners' previous experiences of online learning and higher education, and how these transitions may be best supported, particularly for international postgraduate learners making these transitions within a shorter timescale, who may otherwise experience isolation and dissatisfaction. These areas merit further research and a stronger evidence-base that we intend to pursue in the future as we refine our conceptual framework.

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Biographies

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Kerr Gardiner was Head of Learning Technology and Media Production at the University of Glasgow but is now working freelance. Kerr focuses on how the evolving digital landscape is blurring boundaries, physical/virtual spaces and campus-based/ distance learning, and how to meet this challenge through the development of MOOCs, online distance PGT programmes and UG campus-based online courses.

Professor Moira Fischbacher-Smith is Assistant Vice-Principal (Learning & Teaching) at the University of Glasgow. Moira has worked in UK HE for 22 years, and has been involved in a number of studies supporting international students. Moira has a long-standing engagement with supporting staff and students in adapting to new learning and teaching environments.

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