JOURNAL OF
Perspectives in Applied Academic Practice

'Blended' Learning at the University of the Highlands and Islands: A Case Study in Self-Awareness and Policy Making

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ABSTRACT

The University of the Highlands and Islands (UHI) provides a case study on reflective practices in blended learning at an institution that is overcoming unusual geographic and demographic pedagogical challenges. These practices may be of value to other institutions, from those employing 'traditional' delivery, to the latest technologically supported, asynchronous teaching methodology.

This paper has developed from the outputs of a project conducted within UHI to collate recent pedagogical research, both external and internal, in order to identify goals for future pedagogical development within the institution. We thus examine the evolution of UHI's blended learning practice as a case study in the adoption and refinement of blended learning in a higher education institution with a specific geographical context. We will highlight some examples of how UHI has sought to characterise its own delivery, measure success, and translate this into effective strategy and policy across the institution.

Keywords: guidance blended learning; policy; self-awareness; higher education

Introduction

> *Proof of the evolution of higher education institutions can be found in the great diversity of institutional forms … from small colleges and universities of applied science to complex university systems and from private colleges to global online universities.* (Ehlers & Schneckenberg, 2010, p. 1)

The University of the Highlands and Islands (UHI) is a non-traditionally structured institution: a network of thirteen academic partners (colleges and specialist research centres) across the Highlands, the Northern and Western Isles, Argyll, Moray and Central Scotland. This is an area of some 17,000 square miles, over one sixth of the UK's land mass (Simco & Campbell, 2011). UHI has around 7,732 students, 43% studying part time and 57% full time; three-quarters of them reside in the predominantly rural Highlands and Islands (UHI, 2014). This presents unique challenges to learning and teaching.

Blended learning is defined within UHI as a "*considered approach that selects from a range of traditional face-to-face methods and e-learning technologies to facilitate student engagement, develop independent learners and enhance the learning experience*" (Campbell, 2009). Many institutions have adopted blended learning for reasons of increased flexibility and meeting the needs of a diverse student body. Students are increasingly satisfied when courses flexibly meet their needs while maintaining quality (Sun, Tsai, Finger, Chen, & Yeh, 2008), and blended learning may improve retention over traditional delivery (Hughes, 2007).

However, in contrast to many institutions, the geographical dispersion of UHI students was a primary driver of the adoption of blended learning. The advantages of temporal and spatial flexibility are valuable for academic staff as well as students, who both may be situated far from campus. UHI aims to provide a curriculum capable of attracting students to the region as well as enriching the environment for local students, bringing social and economic benefits (Campbell & Wright, n.d, p. 4). Adopting multiple delivery methods provides scope to reach students regionally, nationally and internationally (Simco & Campbell, 2011).

UHI has been noted as being at the forefront of innovation in blended learning delivery in higher education institutions (Simco & Campbell, 2011; Murray, 2011). Blended learning at the University embraces delivery at a distance while maintaining traditional aspects of campus-based teaching, supporting both with the use of an online virtual learning environment (VLE) (Simco & Campbell, 2011, p. 4). Video conferencing (VC) connects multiple users with video, audio, on screen text and images and may be used as an alternative to face-to-face. Recordings of live VC lectures are available for later viewing/reviewing. UHI have invested

heavily in video conference resources, significantly increasing the proportion of teaching at UHI using this technology (2001/02: 1,091 hours; 2012/13 :7,956 hours; 2016/17 predicted usage 13,064 hours [UHI, n.d.a]).

The University website describes online study as:

> ...delivered entirely by computer and over the internet using the latest in online teaching and multimedia technology. All study materials, teaching and technical support is available online so most of our courses do not require you to attend in person (UHI, 2010)

Although some programmes combine online with VC or face-to-face teaching, UHI's online courses can usually be accessed entirely through the internet without requiring face-to-face or VC. Approximately 15% of UHI students currently study on fully online programmes. Online learning can include chatrooms, discussion boards, podcasts, or videocasts, and is generally based around a Virtual Learning Environment (VLE).

VLEs provide an online interface to connect tutors and students, including notice boards, email, discussion boards, chatrooms and file repositories. Blackboard Learn+ (Blackboard, 2014) is being embedded across the UHI network as part of UHI's learning and teaching strategy (UHI, 2011a, p. 3). Many courses utilise Blackboard, but use varies from simply file repository to a comprehensive online learning environment. Hence the VLE should be described as a tool, or collection of tools, for learning, not a delivery method.

UHI is committed to ensuring students receive excellent teaching no matter the 'mix' of blended learning. This has resulted in considerable self-reflection as an institution, and the continued evolution of best practice, strategy and policy within the University. In the past six years, UHI has commissioned a number of surveys and reports to understand student needs and perceptions of teaching at UHI, with a focus on delivery methodology. In reviewing internally focused pedagogical research at UHI, we identified efforts to:

1. Characterise delivery
2. Measure effectiveness of delivery
3. Identify best practice
4. Adopt new strategy and policy to ensure the highest quality teaching.

In this paper, we present three examples: (1) student satisfaction; (2) interaction and support and (3) staff needs, where internal research projects have informed policy, presenting each in the context of the wider literature.

Example 1: Student satisfaction

The wider context

Blended learning can potentially influence both student satisfaction (Sun et al., 2008) and retention (Hughes, 2007). The increasing reliance on technological tools to support learning in their own unique distributed context, and the need to understand how effective this was proving in practice, prompted UHI to evaluate impacts of blended learning on the satisfaction of their own student body.

Blended learning is, broadly speaking, a combination of face-to-face with online or technologically supported components or information computer technology (ICT) (Ehlers & Schneckenberg, 2010). The combination of traditional face-to-face delivery – when tutors and students are physically located in the same place, classroom, field, laboratory or studio – with emerging technological methods, such as mobile technologies, should be driven by the context for learning. The integration of multiple methods should enhance learning and teaching, not simply be an add-on to an existing approach (Beetham & Sharpe, 2007).

There has been a shift to individual and lifelong learning in the last twenty years, with embedded ICT and a multitude of learning preferences and approaches combining synchronous and asynchronous learning, online with face-to-face, and collaborative with self-directed learning (Ehlers & Schneckenberg, 2010, pp. 1–6; Pearce, Weller, Scanlon & Ashleigh, 2010). An increasing number of studies examine the nature of the blend in HE: what technologies are included, to what extent they are utilised, and what student attributes they cultivate. Universities must adapt to meet the expectations of a technologically transformed world and cater to a wider range of students who don't necessarily expect or desire 'traditional' delivery methods. Students may even be missing out if their teaching does not include ICT.

The idea that younger people are 'digital natives', so skilled at manipulating technology that they require radical educational restructuring to accommodate their capabilities and needs as learners, influences thinking around blended learning and emerging higher educational provision (Bennet, Maton & Kervin, 2008; Conole, de Laat, Dillon, & Darby, 2008). While there is a prevalence of technology in everyday life, it can be argued that the concept of digital nativeness masks a more complex picture of the 21st century student (Sharpe, Beetham & de Freitas, 2010). Bennet, Maton and Kervin's (2008) evaluation of the concept discusses how belief in the digital native obfuscates the demographic challenges of modern universities: variable student needs and abilities according to socio-economic status, age, cultural background and previous experiences (Holley & Oliver, 2010). They argue that younger people vary in skill, use, and desire for technology.

The effectiveness of a blend may be measured through student engagement, resulting academic achievement, student retention rates and/or student feedback. Evidence from published literature suggests digital literacy must not be underestimated as a factor in determining the effectiveness of technology-based learning. Students with lower tech-competency (actual or perceived) feel less connected with asynchronous learning methods in particular (Sun et al., 2008; Wu, Tennyson & Hsia, 2010; Lyons, Reysen & Pierce, 2012), and students with low capability are more likely to drop out of distance education altogether. When students were asked to rate their technological competence, then their learning and social experience was examined, Lyons, Reysen and Pierce

(2012) found self-assigned competency was directly related to learning experience. Induction provides the opportunity to identify skill gaps and ensure students know what to expect from their studies and how to make the best use of blends available (Ellis, Goodyear, Prosser, & O'Hara, 2006).

Student study strategies are important: ICT courses that adopt co-constructive delivery (where students take an active role in their own learning and the creation of their learning materials) may only be effective if students are equipped with the learning strategies (and the desire) to take advantage of them. Diaz and Entonado (2009) argue ICT-based delivery may be more effective than face-to-face in explicitly communicating learning structure; allowing students to build frameworks for learning through conceptual mapping and visual schemes. Deep learning, something non-traditional blended delivery methods may especially lend themselves to, might not be valued by every student. This complexity echoes the caution of Bennett et al. (2008) on the stereotypical digital native, highlighting the importance of comprehensively assessing not only what is being delivered, but how different students learn and use technology, especially when learning delivery methods are optional.

UHI context

Kemmer (2010a and b) examined student satisfaction with UHI's delivery by analysing 160 completed questionnaires and 15 group interviews with students from seven different programmes of study. While acknowledging the sample was not representative of the whole student body (most respondents were full-time, female students from a small number of study programmes and not all of the 13 academic partners), Kemmer found 86% of students were 'quite' or 'very satisfied' with teaching that used ICT, compared with 93% for 'traditional' methods. Expectation played a role: students who felt there was more ICT in their course than they anticipated at enrolment (34% of respondents) were 19% more likely to be dissatisfied than those who found the blend of ICT and 'traditional' methods was what they expected (Kemmer, 2010b, p. 4).

Kemmer (2011) reviewed external literature on best practice and outlined barriers to student engagement with online study, including:

- Student expectation – not knowing what blended learning entails or why it is being used
- Poor design of blends and lack of provision
- Technological failures
- Low digital literacy
- Isolation, particularly from peers
- Poor communication from staff.

Potential solutions included clearer course descriptions for incoming students, the facilitation of staff training and the redesigning of some programmes to make better use of the potential of technology. Ongoing staff support (below) in the implementation of blended learning, and for students in its use, were highlighted as ways to address the issues.

De Lima, Brown and Sykorova (2011) from the UHI Centre for Remote and Rural Health examined reasons students failed to complete their courses, making recommendations to tackle this issue. The report utilised postal and online questionnaires, semi-structured telephone interviews and demographics from the UHI Student Information System (SITS) for the academic years 2007/08 to 2008/09 (de Lima et al., 2011, pp. 9–12). There were 204 responses to the questionnaires and 211 interviewees.

Teaching and learning (including delivery) were among the key issues identified as influencing student retention. Forty-four percent of non-returners and students who had withdrawn early indicated dissatisfaction with their teaching methods, and 27% indicated they were not happy with their online delivery (Table 2). The importance of expectations was highlighted again: 36% of respondents felt their course had not met their expectations (de Lima et al., 2011, p. 38). Thirty percent of respondents in this study had missed, or were not offered, an induction (de Lima et al., 2011, p. 39).

De Lima and colleagues recommended enhancing student induction to ensure student expectations were realistic and ensure skills gaps are addressed and support provided (de Lima et al., 2011, pp. 65–67). Although it was unclear how representative the report's findings were by programme or by academic partner, and despite the demographic imbalance in respondents, this work and Kemmer's earlier report (above) were two key pieces of research highlighting potential issues facing students and informing the direction of subsequent improvements at the University.

Implications for policy and practice

The impacts of the recommendations from Kemmer (2010a and b; 2011) and de Lima et al. (2011) are evident at a strategic level at UHI. To meet student expectation, delivery had to be characterised so that the learning experience could be effectively communicated to incoming students. As UHI employs multiple delivery methods across 13 academic partners, there are strategic challenges in networking courses and communicating both the blend and the availability across the network.

The 'seven stages' model was developed within UHI to characterise the networking of delivery from fully on-site/face-to-face, to fully networked/online (Figure 1) (Wilson, n.d). This model has since been superseded, but it raised issues that have informed strategic development at UHI. For some staff, the linearity of the scale appeared to indicate a desire for progression from one stage to the next; a hierarchical characterisation hinting that one delivery method may be more desirable than another. There were difficulties with the interpretation of definitions and how they could be effectively communicated to incoming students.

Figure 1 The seven stages of networked learning (Wilson, n.d). This model was an early attempt at UHI to characterise delivery across the network, superseded by the *Four Models* (Campbell & Wright, n.d)

The 'seven stages' were superseded by the *Four models describing UHI's delivery* (Campbell & Wright, n.d) (Box 1), part of the Curriculum for the 21st Century (C21C) - an initiative redefining delivery of the curriculum at the University (UHI, 2010). C21C strategies outline the view that a more networked and blended approach enhances the student experience and is more sustainable. Aiming to "capture the relationship between the student, their programme and location of study" (UHI, 2013a) the *Four models* concept is a student-facing definition of the learning experience a student can expect depending on which mode their chosen course takes (Innes, 2013). The four models are:

1) Local
2) Site-specific
3) Network
4) Off-campus.

These models streamline how delivery methods are communicated to students in UHI's marketing (Innes, 2013), helping address student satisfaction based on inaccurate expectations (Kemmer, 2010b, p. 4; de Lima et al., 2011, p. 66). Student satisfaction is currently monitored by internal evaluation at both module and programme level, and increasing importance is placed on the results of the National Student Survey outcomes. Actions from all of the above are channelled into an annual cycle of reflection and enhancement, in Self Evaluation Documentation and Quality Monitoring Dialogues at module, programme and Subject Network level.

Box 1 *Four models describing UHI's delivery*

To effectively communicate how a course will be delivered to incoming students and ensure they know what to expect from their time studying at the University of the Highlands and Islands, the *Four models describing UHI's delivery* (Campbell & Wright, n.d) were adopted by the University as part of the Curriculum for the 21st Century (C21C).

In this model, *local* and *site-specific* programmes are usually "delivered face-to-face, but will increasingly make use of blended learning" as appropriate. The exact nature of the blend used in these programmes is not specified, although it is recognised elsewhere in the report that provision should be decided depending on the optimum needs of a particular programme. *Local* and *site-specific* programmes usually require students to attend a specific academic partner, often because that campus has specialised provision. The main difference between these two modes is that *local* programmes are aimed at local students, while *site-specific* programmes are considered to have more national and international appeal (Campbell & Wright, n.d.).

Network programmes are available at the majority of academic partners and involve a higher proportion of ICT based delivery in an "appropriate mix of face-to-face, video conference and online delivery and support" (Campbell & Wright, n.d, p. 3).

Off-campus programmes are entirely online and do not require students to attend any academic partners, although induction and support may be provided by an allocated campus.

Example 2: Interaction and support – the role of the teacher

The wider context

Even when blended learning is successful, this does not diminish the need for support from tutors. The importance of the perceived presence of the tutor and peer group in blended learning – particularly for fully online students – is a recurrent theme in the literature (Sung & Mayer, 2012). Failure to recognise distress from isolation, lack of technical skill, or breakdowns in technology or communication creates the potential for student dissatisfaction with distance and online education. Online learning reportedly has a higher dropout rate than traditional delivery methods: tutors play a key role in student persistence by supporting students in their study strategies and academic integration (Jelfs, Richardson, & Price, 2009; Sharpe, Beetham, & de Freitas, 2010). Sung and Mayer (2012) argue that a sense of presence plays a pivotal role in engagement with a course, identifying challenges for the tutor such as knowing a student's name, responding to them quickly and giving positive feedback and good communication. These are key to a student's feeling of inclusion and their engagement and enjoyment of learning.

VLEs provide a multitude of potential communication and teaching routes to engage students and provide a sense of community. A sense of community may be linked to better learning outcomes and student satisfaction; in a fully online course where students were asked to blog regularly about their learning experiences, Dickey (2004) found this helped combat feelings of loneliness, providing an enhanced sense of purpose. Asynchronous video may give students the chance to see and hear their lecturer, and even introduce themselves to an otherwise faceless online peer group (Borup, West, & Graham, 2012).

New types of interaction emerge from asynchronous communication that may hinder tutors' ability to pick up visual and auditory cues, making the social experience between student and staff qualitatively different. Sensing the personality of a tutor visually or in writing – gauging whether they are lively and engaged with their own teaching material – is important to students (Sun et al., 2008; Diaz & Entonado, 2009; Kim, Kwon, & Cho, 2011; Borup et al., 2012). Social interaction and the 'warmth' of a lecturer, while important in face-to-face teaching, may play a larger role in ICT-based delivery, affecting students' willingness to communicate and perceptions of teaching quality (Jelfs et al., 2009).

VC also presents potential obstacles for interaction: students may be reluctant to speak on camera (Gillies, 2008) and it is harder to learn names without a physical presence. There is a tendency for lecturers to 'lecture', struggling to engage students in discussion or feedback. However, these issues can be overcome and are not flaws with VC as an actual delivery method (Gillies, 2008). VC can be used creatively to generate unique opportunities and experiences. Badenhorst and Axmann (2002) describe a case study where arts students were given behind-the-scenes access to a puppetry production over the course of several weeks using synchronous VC with the puppeteers and watching asynchronous videocasts of dress rehearsals and production set-up. It gave students unique access to people and situations that would otherwise have been outside their reach and provided material that was later developed into coursework for future classes.

The UHI context

Summers and Douglas (2011) reflected on attempts to engage online and distance computing students at UHI, utilising multiple technologies to provide equal access for all students to tutors and course material. They were concerned with student satisfaction and ability to cope with autonomous study, but also tutor perceptions of their role in distance learning. They asked twelve computing students and two staff members about their use of tools such as Blackboard, TeamViewer and CamStudio/Jing for feedback and gave a brief outline of their findings regarding each technology. All of them are identified as potentially positive ways to engage students.

Interaction issues were highlighted in de Lima et al.'s (2011) report: students were concerned with teaching consistency between tutors on the same course and whether tutors met the needs of mature and online students with time management issues, who also faced feelings of isolation (de Lima et al., 2011, p. 63). Some respondents found the asynchronous delivery of online courses did not give them enough interaction with staff or peers (de Lima et al., 2011, p. 64). While some students made contact independently through social media sites, mature students in particular reported finding this an unsuitable solution.

Smith (2013) identified indicators of quality in online learning and teaching, using these to suggest new quality standards in the online programme BSc (Hons) *Sustainable Development*. Recommendations included upper limits to weekly volumes of content, timely responses to student emails, faster assignment feedback, regular updates from tutors and the full utilisation of VLE tools as well as external tools (e.g. Skype) to enhance communication. Interestingly, Smith also recommended maximum limits for mandatory pre-arranged synchronous meetings/tutorials, highlighting the need to remain flexible for the sake of the busy student. Expectations of module content should be addressed early and explained clearly, and 'icebreakers' should be arranged to allow students an opportunity to socialise with their peers.

Implications for policy and practice

The C21C includes definitions of optimum standards for staff-student contact time for full-time degree modules per semester (UHI, 2013*a* and *b*). Multiple blended learning methods are acknowledged as contributing to this contact time: "live lectures (face-to-face, video conference or other synchronous means), tutorials, and live web interaction (webchat, synchronous discussion session, etc.)" alongside "laboratories, workshops, staff led field work and studio work with a member of academic staff" (UHI, n.d.b, p. 3).

The UHI's *Blended Learning Standards* were developed to provide the structure and pedagogic knowledge and skills required to ensure equivalence, enhance the student experience, and guide staff in the move from purely face-to-face teaching to the pedagogy of

blended learning. The standards comprise three documents: 1. UHI Blended Learning Standards; 2. UHI IT essentials and 3. Accessibility checklist. All staff contributing to new programmes are asked to engage with these documents and training, as are staff working on curriculum developments with UHI's Educational Development Unit (EDU). The documents include guidance on structuring the learning interface to include interactivity and active learning. Further guidance documents, for example *Selecting Appropriate Technologies for Teaching*, are also made available to staff.

In 2010, 'Good Practice' sessions were organised, where practitioners shared experience of successful delivery in lunchtime sessions delivered across the UHI network by video conference. These sessions were recorded and made available to staff as an ongoing resource. The success of UHI staff in engaging with technologies appropriately is monitored mainly through routine module or programme level feedback from students. In addition, peer observation is used in some partners as a developmental tool. Identification of good practice is enhanced by the introduction of the UHI Students Association led Teaching Awards, introduced in 2010/11 to recognise engaging and innovative teaching in different pedagogical contexts, for example in VC-based delivery.

Example 3: Staff needs

The wider context

The more diverse experiences provided by blended learning may require restructuring of teaching and curriculum design (Sharpe, Beetham & de Freitas, 2010). The changing role of the tutor in this new methodology is a source of concern for some staff (Hanson, 2009; Summers & Douglas, 2011). With the proliferation of ICT and blended learning in HE, it is important to consider how staff are reacting to change, particularly where teaching itself has been 'flipped': that is, with learning taking place predominantly outside the classroom and teaching time devoted to discussion, collaboration and developing ideas (Ellis et al., 2006; Sams & Bergmann, 2013).

While some studies suggest no real difference in the function of face-to-face teachers versus those adopting ICT (Diaz & Entonado, 2009), training, experience and attitude influence adoption and effectiveness of blended learning by staff (Mahdizadeh, Biemans & Mulder, 2008; Sun et al., 2008; Gonzalez, 2010). Mahdizadeh, Biemans & Mulder (2008) found adoption of ICT by tutors in their delivery was linked to their general attitude towards technology: staff with positive outlooks regarding technology were more positive about blended learning and more likely to adopt technology in their teaching (Mahdizadeh et al., 2008, pp. 152–153).

The perceived shifting skill-set may leave some teaching staff feeling less able to engage with students than they may have traditionally (Hanson, 2009). ICT may merely be used to disseminate information, instead of facilitating constructive learning with students (Gonzalez, 2010). As most staff have not experienced blended learning during their own time as a student, there is a potential gap in understanding the contemporary student experience.

Students also use ICT to enhance their own learning, e.g. through social media communication with peers and online access to journals. This may be perceived by tutors as a threat to the balance of the student-tutor relationship (Hanson, 2009). Indeed, there may be a mismatch between what students expect from their tutors and what tutors believe their role should be. Jelfs et al. (2009), and Gonzalez (2010), found students emphasised interaction and social integration, while tutors placed importance on the transmission of knowledge.

The increasingly egalitarian relationship between teachers and students is not always reflected in course design, which can constrain the capacity for change. In designing for blended delivery, it is not appropriate to simply deliver face-to-face lectures via a different medium; it is necessary to adopt methodologies that complement and effectively integrate technology (Diaz & Entonado, 2009; Kim et al., 2011).

However, there is a risk of 'blaming' staff for not adopting ICT and embracing blended learning, rather than supporting them towards new delivery methodologies (Hanson, 2009, p. 557). Positive support from management is needed to allow staff to adapt to meet the real (and perceived) challenges that come with the growth of blended learning.

The UHI context

Murray (2011) addressed the issue of staff training, giving an outline of the Masters in Professional Development and Postgraduate Certificate in Teaching in Higher Education (PGCert THE) at UHI. These are part of a programme to assist college staff to take the step from teaching Further Education, to HE in the context of a networked university. They found staff uptake and attitudes towards career progression development (CPD) were variable across the UHI partnership, and recommended further study into the complex social environments of each academic partner and how they interacted, in order to communicate effectively and encourage staff progression throughout the UHI network (Murray, 2011, p. 27).

Implications for policy and practice

To positively address perceived 'myths' about online, face-to-face and VC delivery, Campbell (2009) delivered a presentation to staff across the UHI network discussing potential concerns; for example, that teaching must be delivered by one method at the exclusion of another. Campbell also emphasised the potential benefits of blended learning, including interactivity, access to expertise, and efficiency, while considering and discussing potential barriers to effective implementation, such as staff access to training.

The *UHI Integrated Learning, Teaching and Assessment Strategy 2010–2011* (UHI, 2011a) outlines ten core development areas, three specifically concerned with delivery: *blended learning*, *video conferencing* and *VLEs*. How modules can be delivered efficiently through the UHI network is considered, and there is recognition of the role of staff development to effectively deliver blends, and good programme design (UHI, 2011a, p. 2–3). Steps identified for successful implementation of the strategy include to "build among the teaching staff knowledge and understanding of the components of blended learning and the skills in using them to enhance the student experience" (UHI, 2011a, p.4).

The *UHI Blended Learning Standards Checklist* (UHI, 2011b) provides guidelines to assist staff delivering their programmes using blended methods, including choosing the appropriate blend, effective communication, assessment and feedback. There are also notes on how to ensure the blend is right for the content, and ensuring students are aware of what to expect of their learning experience and have the technological access and skill to meet the requirements of the blend (UHI, 2011b, p. 4).

The C21C also addresses the necessity to meet staff training and support needs (UHI, 2013a and 2013b), assisting staff to tailor blends to meet the needs of their students and their particular context for learning and teaching.

Conclusions

The remote and rural location of UHI's 13 partner institutions and colleges, and the dispersed student population, makes technological solutions ideal in learning and teaching at this institution. The literature suggests that the technology itself does not define the success of student learning, but its effective utilisation and innovative course design. Students must know what to expect from courses, and staff require support and opportunities for career development.

UHI gathers qualitative and quantitative information from students with the aim to measure success: exploring student satisfaction, issues behind retention, and expectation. The institution has invested in exploring these issues, and the authors recommend formation of a centralised repository to ensure widespread adoption of any recommendations that ensue. Mechanisms to ensure that the outcomes of such studies routinely and effectively inform policy change and teaching practice – and so improve the student experience – are essential to maximise the value of these studies. We have noted examples of where such research has had a successful impact, for example through efforts to characterise course delivery in a manner easily communicated to, and understood by, incoming students. Monitoring of the outcomes of any such change completes the reflective cycle and can be achieved by a combination of annual quality enhancement processes and specific interrogations.

Altering pedagogy for a blended delivery can be a challenge for staff, requiring support at all levels of the institution. Open dialogue with staff has allowed UHI to adapt according to feedback; for example, when the 'Seven Stages' model of delivery did not meet staff expectations. This can then be folded into the latest strategies, as the details of the C21C reveal.

Changes in learning and teaching that result from increasingly integrated technology in blended delivery are a challenge for both students and staff. By commissioning reports and asking questions, UHI has demonstrated self-awareness and a willingness to identify areas for potential improvement, acting upon them through policy change.

Implications for practice

- The routine gathering of student feedback helps an institution meet student needs. This should be coupled with willingness to invest in openly exploring areas that require improvement.
- Student feedback can be used to inform changes in policy, teaching, and strategy.
- Creating clear and easily understood definitions of delivery will ensure student expectations are accurate from the offset.
- Staff require support toward new pedagogy through open dialogue within the institution, exploring the possibilities of different modes of delivery, making teaching standards clear, and providing training and guidance.
- Self-awareness is key to meaningful policy change: long-term investment in exploring issues around pedagogy should result in improvements that meet both student and staff needs.

Biographies

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