Vol 9 | Issue 2 (2021) | pp. 109-117

JOURNAL OF
Perspectives in Applied Academic Practice

www.jpaap.napier.ac.uk

Developing a School-Wide Framework for Blended and Online Learning and Teaching (BOLT)

Sarah Honeychurch and Matt Offord

University of Glasgow

ABSTRACT

This article describes how the emergency shift to remote teaching at the Adam Smith Business School (ASBS) in 2020 led to the emergence of a new framework for blended and online learning and teaching (BOLT). We explain how a quorum of early adopters and innovators developed this framework from first principles and how it differs from existing frameworks for digital development. Rather than adopt an existing set of procedures, the framework was developed from the bottom-up with the advantage of high levels of agility, and commitment. Early adopters of technology enhanced learning and teaching (TELT) became bricoleurs, adapting and repurposing existing technologies and processes rather than adopting an entirely new strategy. This article will describe the process of empowering early adopters to enhance crisis response as well as giving a detailed overview of the framework, which can be used in other contexts. Beginning by describing the principles for developing remote teaching from scratch, we provide a case study in implementing such a framework.

Keywords: bricolage, blended learning, online learning, emergent strategy, early adopters

Introduction

This article explores the unexpected role-shift for early adopters of technology enhanced learning and teaching (TELT) during the Covid-19 crisis. In universities where TELT often occurs in the margins of campus-based traditional lectures (e.g., Russell Group universities), early adopters and experts are accustomed to working in some degree of isolation and exploring digital resources independently of others. Pre Covid-19, the Adam Smith Business School (ASBS) (where the authors are employed) was tentatively exploring digital education in an educational environment often typified as *post-digital* (Jandrić, Ryberg, Knox, Lacković, Hayes, Suoranta, Smith, Steketee, Peters, McLaren, & Ford, 2019). We will explore the rapid shift in emphasis away from these sideline projects to performing in a high-pressure, strategic environment with an unprecedented interest in and need for TELT. In a very short period, a group of TELT early adopters were empowered to become influencers and policy makers and to produce a robust framework for blended and online learning and teaching (BOLT) for use in all courses across the business school.

This article provides a case study showing how principle-led bricolage can provide a responsive framework for rapid teaching transformations. It explains how the sometimes informal, furtive, and unstructured self-development of TELT enthusiasts played a key role in the pivot online. The lack of a pre-existing institutional framework for digital transformation together with indifference, or resistance, at a local level to digital education made a principle-led bricolage an effective approach to creating a responsive framework.

Literature review

The role of early adopters in higher education has been described by Hixon, Buckenmeyer, Barczyk, Feldman, & Zamojski (2012) and Bennett (2014) but the term is more widely used in the context of business and innovation. Everett Rogers is widely credited with the creation of an innovation life cycle and, pertinently here, described the role of "technology clusters" (Rogers, 2010, p. 235) where a group of similar technologies are adopted rather than a single product. A conception of online technology as an assemblage of software, hardware, individuals and ideas about online pedagogy (Gourlay, 2012) appears to well describe the role of technology clusters and the work of the BOLT project.

Hixon et al. (2012) conceive of and demonstrate the role of innovators and early adopters as a beach head through which ideas about online learning might pass, to get a foothold and colonise the more difficult territory beyond. In that case the authors advocate the use of a mentoring scheme to overcome resistance (Hixon et al., 2012). The situation at ASBS had parallels with and important differences from this. The role of existing early adopters as conduits was somewhat similar but the remaining staff were less able/willing to resist adoption of digital education. Bennett (2014, p. 9) observes how technology can be seen as "technology

for its own sake"; the situation during the Covid-19 lockdown became about technology as the main solution and "the importance of early adopters as teachers, as Bennett (2014) also notes.

Early adopters may be reluctant to share ideas if, for example, they forge their identities based on specialised knowledge (Moldovan, Steinhart, & Ofen, 2015). Furthermore, scepticism about online learning may induce early adopters to adopt a low profile working on small projects in the margin. The pivot online changed this by generating a critical incident where focus suddenly rested on early adopters to assist colleagues. This also introduced the possibility of differing goals for early adopters (as supposed *evangelists*) and the majority who were seeking not online perfection, but basic pedagogical goals (Nordmann, Horlin, Hutchison, Murray, Robson, Seery, & MacKay, 2020; Bennett, 2014). The early adopters in ASBS had been exposed to *best practice* for online teaching which espoused tenets of remote teaching such as teaching presence, asynchronous learning and student-centred learning (e.g. Boettcher & Conrad, 2016; Brenton, 2015). These points of reference naturally informed the development of the framework although the early adopters appreciated that modification would be required in order to adapt it for wide-scale use under tight time constraints.

Background, motivation and strategy

In March 2020, along with most of the universities in the United Kingdom (UK), ASBS made a rapid pivot to remote teaching as a swift solution to an emerging crisis. By April it became apparent that this 'new normal' was not going to be merely a short-term situation, and ASBS began to make contingency plans for the following academic year. With large numbers of international students potentially studying remotely, it was important that we devised a strategy for high-quality learning and teaching that could be undertaken by geographically dispersed students without compromising the quality and rigour of our teaching portfolio. ASBS had not previously developed a framework for the transition to remote teaching because there had been no perceived need. However, there are several frameworks which have been used successfully elsewhere. For example, Adekola, Dale, & Gardiner (2017) describe the framework they developed for their initiative as well as describing two other e-learning frameworks. Additionally, the ABC Curriculum Design (UCL, 2018) has been successfully used at the University of Glasgow to develop blended and online courses as part of the framework approach set out by Adekola et al (2017). However, academics at ASBS were for the most part unfamiliar with online learning and were faced with the need to swiftly transfer face-to-face courses online. In order to provide a more pedagogically robust alternative for the longer term, it was necessary to build a framework which supported academics at all stages of the digital journey and did not assume any level of digital competence.

Strategy frameworks have a disputed role in higher education, the stereotypical narrative being of conservatism and resistance to change (Hixon et al. 2012; Wilkins & Huisman, 2012; Pucciarelli & Kaplan, 2016). This often stems from an institutional wariness of corporate strategy as managerialism which seeks to divert education from its traditional role as a public good (Greckhamer & Cilesiz, 2020). In fact, higher education institutions (HEIs) are capable of strategic response but subject to multiple and complex influences (Wilkins & Huisman, 2012; Louvel, 2013; Pucciarelli & Kaplan, 2016). Another problem with frameworks developed within educational research is the isolation of academics working in different fields from that very research, leading to a lack of understanding or commitment (Nicol & Draper, 2009). A bottom-up response can avoid prescription and the restriction of creativity, but it clearly needs to have a direction. The early promotion of principles assists in galvanising the iterative progress of an educational transformation (Draper & Nicol, 2013; Nicol, 2012; Nicol & Draper, 2009). This is because they capture the idea of a strategy and encourage action without prescription (Draper & Nicol, 2013). Therefore, the adoption of home-grown principles was used to launch an emergent framework built as a bricolage of experiences, examples and guidelines from different disciplines and viewpoints. Louvel (2013) adopts Lévi-Strauss' concept of bricolage to describe how academics can build unique programmes by drawing on and repurposing existing resources. Early adopters at ASBS were also able to draw on existing experience and technology and repurpose it without a complete re-write of higher education processes and this was expedient under the circumstances. The co-creation of online courses between academics from different disciplines and digital acceptance created a varied and often experimental approach to the pivot. The aim of the BOLT project was not so much to ensure compliance to a top-down framework as to work with, and make coherent, the work of the *bricoleurs* (Louvel, 2013). Bricolage is seen as an optimal strategy in organisations which are resource constrained and willing to circumvent bureaucracy (Cleaver, 2012). This experimental approach was adopted in order to support rapid bottom-up innovation with academics having the freedom to design their own courses, rather than following prescribed processes.

Because of the potential of students studying in different time zones, ASBS made the decision that all intended learning outcomes (ILOs) would be achievable asynchronously, with live sessions being used for community building and troubleshooting (Boettcher & Conrad, 2016; Brenton, 2015). In order to design this, to ensure a high-quality experience for all students, and to support staff as they designed and re-developed their courses and activities, we set up a working group (the BOLT working group) comprised of early adopters of TELT and colleagues with experience of blended and online learning and teaching. The ASBS was in the midst of creating its first fully online programme and therefore had very few TELT academics (two in fact). However, there was a core of academics and professional staff who had either experience of online teaching or had actively learned about online teaching prior to the crisis. Using Microsoft Teams as the hub, we formed four sub-groups: pedagogic principles, staff development and support, programme and course delivery, and operations. All of the stages of course design were thus represented, the first three of which needed to happen before the more operational aspects of building and teaching online could occur. Given the amount of knowledge required to pivot online competently, the first few months of this transformation were understandably hectic. It could be imagined as an institutional crash-course in remote teaching, where the pedagogical framework was developed as it was

learned, an example of ongoing bricolage. There were concerns over workloads and mental health during this chaotic and hyper-productive period.

The emerging strategy incorporated a significant bottom-up element but was also closely aligned with strategic goals, those being to deliver teaching to the best possible standard from a distance and to ensure that the stringent requirements of our accreditation bodies were met. The early stages were defined by a high level of uncertainty since it was unclear whether blended or even physically co-located teaching would be incorporated at a later date. Ultimately, this uncertainty resolved itself although there remained speculation as to when a 'return to normality' would occur. The naivety of this early position is borne out by the fact that this speculation continues a year later.

The framework

The initial result of all of this collaborative work was an ASBS framework for remote teaching which could be extended to incorporate elements of blended learning as and when this became possible. This framework provides a clear rationale for course design which aligns with institutional policy and external accreditation requirements while being grounded in sound pedagogy. Importantly, it is also practically achievable by busy, stressed academics and is supported by a range of resources designed to suit the different requirements and abilities of academic staff in a large business school.

The framework can be conceptually viewed as comprising three main elements: governance, resources and 'going further'. The governance element is the top-down directive part of the framework and included the principles as well as policy statements concerning accessibility, for example. The main element of the framework is a series of resources: no stipulation is given about exactly which resources are to be used, academics are encouraged to use the resources by fitting them creatively to their courses. Finally, the 'going further' section is open to those academics, including early adopters, who wish to take the opportunity to develop their online teaching even further. The framework is illustrated in Figure 1 with the framework artefacts organised under these elements.

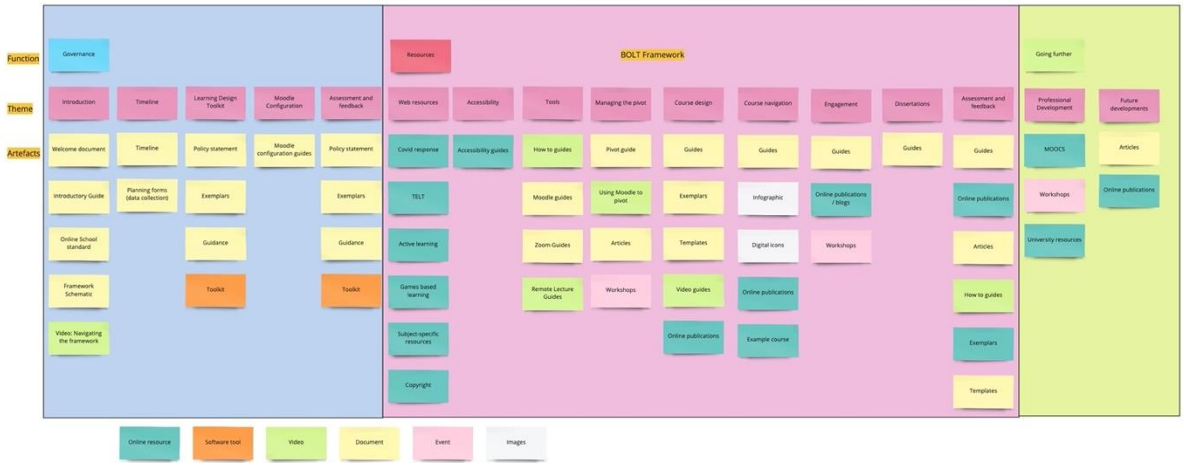

Figure 1 The BOLT Framework, organised under the main elements.

The initial framework was produced in May 2020 by the BOLT working group. The aim was to provide all staff with a 'one-stop-shop' which would walk them through the process of remote course creation, in line with all relevant regulations, while at the same time not stifling the creativity of colleagues with existing expertise. The framework was comprised of several parts, which could be used in any order, depending on the educator's preference. The elements of the framework are described in the following sub-sections.

Learning design principles

This set of seven principles (Table 1) was written in-house by academics with considerable experience of learning design and delivery of online courses. This approach shows ASBS's commitment to research-led and evidence-based learning and teaching. As discussed, the principles create the main structure in an otherwise organic and iterative effort. They created strategic direction without prescription and allowed academics from different contexts to work iteratively towards a shared goal (Nicol & Draper 2009).

Table 1 Principles of the BOLT framework

Key theme	Principle
P1: Clear signposting	Clear aims, learning outcomes and signposting about how the learning materials, activities and assessments align within the context of the course and programme.
P2: Employability	Opportunities for students to develop knowledge (i.e. concepts, theories, methods of investigation), skills (e.g. time management, teamworking, critical analysis) and attitudes (e.g. confidence, resilience) during study that will prepare them for their personal and professional life beyond university.
P3: Structured learning	Students spend time and effort on planned learning tasks and activities, individually and in dialogue with peers (cooperatively and collaboratively) and with others (e.g. teachers), in and out of class.
P4: Equity and inclusivity	A learning environment which is inclusive, in which students are treated fairly and respectfully and have equal access to resources and can contribute fully in tasks and activities.
P5: Feedback opportunities	Multiple opportunities for feedback, generated from interactions with disciplinary content, with teachers, with peers and with others (e.g. practitioners)
P6: Self-directed learning	Opportunities for students to develop self-direction in learning through goal-setting activities, through self and peer evaluation activities, and through participation in course planning.
P7: Learning communities	Teachers establish a presence in the course and take deliberate steps to support the development of learning groups and communities.

A learning design planner

We used these learning principles in order to develop a learning design planner, which walked educators through the process of each course unit, ensuring that the resulting output was grounded in sound pedagogy. The tool (Table 4, Appendix) allowed academics to list ILOs and then relate these to the seven learning design principles in order to create the structure for their online courses.

Principles and reflective questions

This more detailed document talked through the learning design principles in more detail and was designed to be used alongside the planner. Each principle was augmented by a set of reflective questions which were designed to help educators to consider the different ways in which each principle might be embedded in their courses.

School standard for remote courses

This short, one-page document provided a check list of elements for inclusion in a Moodle course, and was hyperlinked to guidance and resources (Table 5, Appendix). This ensured consistency of experience across programmes without stifling academic creativity.

Worked examples

A popular approach was the use of exemplars in order to demonstrate ‘what good looked like’. In order to provide these, we drew on exploratory work of early adopters from all three subjects in ASBS (Accounting and Finance, Economics, and Management). Colleagues who had already created online courses were able to copy these directly into the Moodle based framework or to produce a prototype copy in Microsoft Word or as an infographic. These provided us with practical ‘worked examples’ of straightforward and effective pivot techniques which could be understood and implemented by colleagues with little or no experience of online course design.

Introductory guide

This user guide was written by members of the working group with less experience of online design and delivery than the other groups. This ensured that the tone and terminology used did not alienate colleagues who were unfamiliar with online design by

using either jargon or patronising language and that the contents of the guide were tailored to the needs of those who would most benefit from this approach.

Further resources

Further resources included three Moodle courses dedicated to BOLT delivery: a 'Framework' Moodle to hold all of the aforementioned resources, and which has been augmented with many further resources; an 'Activities' Moodle containing worked examples of relevant Moodle activities, and a 'Sandbox' Moodle where educators could test activities and experiment in a risk-free environment outwith their own course Moodles. The 'Framework' Moodle has been further developed throughout the academic year and now consists of numerous digital artefacts, many of which are short documents or infographics designed to concisely sum up an approach or design process. The Moodle course also includes video resources, digital tools, web resources and live events.

As well as linking to the University wide 'Glasgow Anywhere' initiative across campus which provided expert sessions on numerous technologies, a programme of tailored workshops was provided by ASBS. A regular drop-in session was established for a TELT Lecturer to provide one-to-one assistance and problem solving.

Finally, a Moodle User Group (the 'Muggles') was established to discuss concerns with Moodle usage such as templates, formats and other user-oriented issues. This group was comprised of academics with an interest in online delivery from each of the three subjects taught in ASBS as well as key members of professional services. It reported its discussions to the school learning and teaching committee so that recommendations about Moodle policy could be considered and endorsed, thus ensuring both a bottom-up and top-down approach to online design.

Benefits and challenges

Table 2 Benefits and challenges of the ASBS response

Benefits	Challenges
Reduction of bureaucracy	Changing organisational strategy
Use of in-house resources	Resourcing
Bottom-up innovation	Lack of time
Rapid implementation	Resistance

As summarised in Table 2, the main benefit of the ASBS response was the temporary removal of some of the bureaucracy such as cumbersome course approval processes, replacing these with 'light touch' vetting procedures designed to ensure the framework principles were embedded in learning and teaching and that other university/school policies were followed. This allowed swift development of existing courses and resources to suit them for remote learning and teaching. Early adopters were invited to become bricoleurs not only by using in-house expertise but also by repurposing many existing technologies, such as Moodle and Zoom for remote learning and teaching. This allowed ASBS to innovate in a bottom-up approach, to implement changes rapidly, and to evaluate and make changes as needed.

However, there were of course a number of challenges. While bureaucratic red tape was sometimes suspended or simplified at school level, college and university level policies were harder to challenge and remained powerful conservative forces. In addition, many top-down mandates were issued at short notice, sometimes contradicting existing policies and creating further work for already overstretched colleagues in order to comply with the shifting playing field. In many cases there was insufficient time to resolve issues such as a lack of learning technologists and this put huge amounts of pressure on colleagues grappling with unfamiliar technology. There was also pressure to conserve resources due to uncertainties about student numbers. Finally, many colleagues remained resolutely opposed to remote teaching and held out for a reversal of Covid-19 restrictions. While the lengthy struggle with Covid-19 proved to justify the pivot online, resistance remained a constant challenge.

Recommendations

Table 3 List of recommendations

1. Leadership buy-in
2. Principle led bricolage
3. Mentoring and support
4. Recognition of digital expertise

The Covid-19 pandemic, like any crisis, offers significant lessons from experience. Having gained a hefty increase in a specific capacity (to teach online), it seems sensible to exploit these resources in the future. While the pandemic has changed higher education for the foreseeable future, it also has to be recognised that the future may not (probably will not) involve 100% online teaching and that at some point in the future teaching is likely to shift back to a more blended model. Many of the lessons learned are relevant to blended learning, for digital programmes and for contingency planning in general, and are summarised in Table 3. Any response or change requires leadership buy-in (Gill, 2003) but the specific requirement for crisis response is to support early adopters and in-house expertise by allowing creative and iterative solutions. We found that directing effort with principles allows direction and structure without compromising creativity (Draper & Nicol, 2013). The Covid-19 response also required a very specific group of people to take a prominent role: the early adopters and digital educators, and we recommend that mentoring and support programmes are put in place in order that digital innovators can share the lessons they have learned with others. Whichever group of people are required to deal with a crisis should be recognised and supported and we particularly recommend institutional recognition of the skills needed for digital delivery and the time needed to produce high-class online learning and teaching materials. It is also important to note that different subjects employ different teaching methods and therefore over-standardisation can be counterproductive. Time is needed to develop prototypes and iterate successful learning designs.

Future plans

ASBS will continue to develop the BOLT framework as necessary. Presently, remote teaching has been normal for two semesters and the chaotic shift online of around a year ago seems a somewhat distant memory. With no clear timetable for any possible transition to a blended learning and teaching approach, there has been little impetus to further adapt the current framework. Many students will be dispersed globally, and it seems unlikely that groups of over 300 students will gather for lectures in the near future. Future learning and teaching strategies will need to be cognizant of this and allow for a diversity of methods of design and delivery.

Compared with industry, academia has surprisingly little process mapping and practical how-to documents compared with its burgeoning administrative load which concerns itself more with reporting and conforming to policy (Anderson, 2008). ASBS did not have the luxury of a transformational framework to pivot online (e.g. Adekola et al., 2017). However, the principles devised by ASBS are flexible and accommodating of face-to-face, blended and online modes of teaching. This lends the framework a high degree of adaptability. The principles we devised will continue to play a role to guide the bricoleurs at ASBS as they repurpose and iterate the framework and respond to what remains a very uncertain future.

Much depends on how the framework is ultimately discarded: it has been through the processes of production and exchange and we anticipate that it will ultimately outlive its initial purpose (Hodder, 2012). But dismantling it and re-cycling elements of policy and process (Louvel, 2013) will ensure the framework lives on in ASBS digital education policy at least, or a wider supporting pillar for learning and teaching across the Business School.

Biographies

Sarah Honeychurch is a Teaching Fellow in the Adam Smith Business School and the school lead for assessment and feedback. She has recently submitted a PhD in participatory learning in open, online communities and is interested in exploring alternatives to traditional methods of assessment.

Matt Offord is a TELT Lecturer at Adam Smith Business School. A former naval officer, he teaches management. He is the school TELT lead convening the school's only online Master's programme and also leads an online Micro Credential on Leadership. He is interested in perceptions of online learning and place in virtual environments.

References

Adekola, J., Dale, V. H. M., & Gardiner, K. (2017). Development of an institutional framework to guide transitions into enhanced blended learning in higher education. *Research in Learning Technology*, *25*(0). DOI: https://doi.org/10.25304/rlt.v25.1973

Anderson, G. (2008). Mapping academic resistance in the managerial university. *Organization*,*15*(2), 251-270. DOI: https://doi.org/10.1177/1350508407086583

Bennett, E. (2014). Learning from the early adopters: developing the digital practitioner. *Research in Learning Technology*, *22.* DOI: https://doi.org/10.3402/rlt.v22.21453

Boettcher, J. V., & Conrad, R. M. (2016). *The online teaching survival guide: Simple and practical pedagogical tips*. John Wiley & Sons.

Brenton, S. (2015). Effective online teaching and learning. *A handbook for teaching & learning in higher education: Enhancing academic practice*, pp. 139-151.

Cleaver, F. (2012). *Development through bricolage: rethinking institutions for natural resource management.* CRC Press.

Draper, S.W., & Nicol, D.J. (2013). Achieving transformational or sustainable educational change. In S. Merry, M. Price., D. Carless., & M. Taras (eds.) *Reconceptualising feedback in higher education: Developing dialogue with students* (pp. 190-203). London: Routledge.

Fullan, M. (1994). Coordinating top-down and bottom-up strategies for educational reform. *Systemic reform: Perspectives on personalizing education*, 7-24.

Gill, R. (2002). Change management--or change leadership? *Journal of Change Management, 3*(4), 307-318. DOI: https://doi.org/10.1080/714023845

Gourlay, L. (2012). Cyborg ontologies and the lecturer's voice: A posthuman reading of the "face-to-face." *Learning, Media and Technology*, *37*(2), 198–211. DOI: https://doi.org/10.1080/17439884.2012.671773

Gourlay, L. (2020). Quarantined, sequestered, closed: theorising academic bodies under Covid-19 lockdown. *Postdigital Science and Education*, *2*(3), 791-811. DOI: https://doi.org/10.1007/s42438-020-00193-6

Greckhamer, T., & Cilesiz, S. (2020). The extension of strategic management discourse into public education administration: A critical analysis. *Organization*. DOI: https://doi.org/10.1177/1350508420956323

Hixon, E., Buckenmeyer, J., Barczyk, C., Feldman, L., & Zamojski, H. (2012). Beyond the early adopters of online instruction: Motivating the reluctant majority. *The Internet and Higher Education*, *15*(2), 102-107. DOI: https://doi.org/10.1016/j.iheduc.2011.11.005

Hodder, I. (2012). *Entangled: An archaeology of the relationships between humans and things*. Wiley-Blackwell.

Jandrić, P., Ryberg, T., Knox, J., Lacković, N., Hayes, S., Suoranta, J., Smith, M., Steketee, A., Peters, M., McLaren, P. & Ford, D.R., (2019). Postdigital dialogue. *Postdigital Science and Education*, *1*(1), pp.163-189. DOI: https://doi.org/10.1007/s42438-018-0011-x

Louvel, S. (2013). Understanding change in higher education as bricolage: how academics engage in curriculum change. *Higher Education*, *66*(6), 669–691. DOI: https://doi.org/10.1007/s10734-013-9628-6

Moldovan, S., Steinhart, Y., & Ofen, S. (2015). "Share and scare": Solving the communication dilemma of early adopters with a high need for uniqueness. *Journal of Consumer Psychology*, *25*(1), 1-14. DOI: https://doi.org/10.1016/j.jcps.2014.06.001

Nicol, D (2012). Transformational change in teaching and learning: recasting the educational discourse, Evaluation of the Viewpoints project at the University of Ulster. Funded by JISC UK. Retrieved from: https://www.reap.ac.uk/Portals/101/Documents/PEERToolkit/VIEWPOINTS%20EVALUATION_Final_dn.pdf

Nicol, D., & Draper, S. (2009) A blueprint for transformational organisational change in higher education: REAP as a case study. In T. Mayes, D. Morrison, H. Meller, P. Bullen, and M. Oliver, (eds.) *Education through Technology-Enhanced Learning* (pp. 191-207). Higher Education Academy.

Nordmann, E., Horlin, C., Hutchison, J., Murray, J-A., Robson, L., Seery, M.K., & MacKay, J.R.D. (2020) Ten simple rules for supporting a temporary online pivot in higher education. PLoS Computational Biology 16(10): e1008242. DOI: https://doi.org/10.1371/journal.pcbi.1008242

Pucciarelli, F., & Kaplan, A. (2016). Competition and strategy in higher education: Managing complexity and uncertainty. *Business Horizons*, *59*(3), 311-320. DOI: https://doi.org/10.1016/j.bushor.2016.01.003

Robertson, T. S. (1967). The process of innovation and the diffusion of innovation. *Journal of Marketing*, *31*(1), 14-19. DOI: https://doi.org/10.1177/002224296703100104

Rogers, E. M. (2010). *Diffusion of innovations*. Simon and Schuster.

UCL. (2018, June 11). *Designing programmes and modules with ABC curriculum design*. Teaching & Learning. Retrieved from: https://www.ucl.ac.uk/teaching-learning/case-studies/2018/jun/designing-programmes-and-modules-abc-curriculum-design

Wilkins, S., & Huisman, J. (2012). The international branch campus as transnational strategy in higher education. *Higher Education*, *64*(5), 627-645. https://doi.org/10.1007/s10734-012-9516-5

Appendix: BOLT framework resources

Table 4 The learning design planner

Course Name Code and Code:		
Principles	**Unit 1: [Name]**	**Unit 2: [Name]**
PRINCIPLE 1 **Unit Topics & Timeline** Based on credits & ILOs, divide the course into a number of discrete units.		
PRINCIPLE 2 **Knowledge, skills and attitudes** For each unit: identify the knowledge, skills and attitudes that students will develop.		
PRINCIPLE 3 **Learning activities** For each unit: identify what students will do individually and with others, in and out of class?		
PRINCIPLE 4 **Resources needed: disciplinary, technological and human.** Ensure all resources are accessible and meet inclusivity legislation.		
PRINCIPLE 5 For each unit: Identify what opportunities students will have to generate supportive feedback.		
PRINCIPLE 6 For each unit: Identify opportunities for student self-directed learning.		
PRINCIPLE 7 For each unit: Identify role played by teaching team to establish and maintain social presence (own and students) and to support development of learning groups and communities.		
ASSESSMENTS Identify nature and timeline of formative and summative assessments.		

Table 5 Standard for remote and blended courses in 2020/21

Standard	**Guidance**
Introductory video, audio or recorded PowerPoint presentation that complies with accessibility guidelines (e.g. transcript, captioning) and briefly provides: An introduction to the teaching team. The intended learning outcomes (ILOs). A description of how you will interact with the students and how they can interact with each other. Assessment methods.	Short video 6-8 minutes.
The structure of the course and how to navigate it is clearly communicated	Using preferred approach/media (refer to Framework), provide information to ensure students know how to navigate your course – what to do, how and when. An introduction session early in the course to orient students.
The course is organised by units, not discrete weekly topics.	Number of units will vary according to the number of credits, ILOs and the number and nature of core concepts. *We would not expect to see 10 units in what is, currently, a 10-week course.*
Units should be clearly aligned with ILOs.	Each unit should be clearly associated with at least one ILO.
Student achievement of ILOs must be possible through asynchronous activities.	Use of a diverse range of interactive learning activities. For each ILO, ensure there are asynchronous learning activities.
Each unit contains opportunities for student-led learning.	Provide multiple opportunities for students to complete activities in their own time independently, or with peers.
Each unit provides opportunities for students to reflect on their learning and to provide and receive feedback from the teaching team or peers.	Use of regular synchronous sessions to enhance interaction with staff and peer-to-peer, recognising that not all students will be able to participate and, therefore, ILOs must not be delivered in these sessions. Regular use of discussion forums. Continuous formative feedback and review. Opportunities for peer-to-peer learning and feedback.
Follow university guidance to reduce/remove high-stakes assessment.	Consider alternatives to timed, unseen exams at the end of the course. Provide formative assessment in support of summative assessment weighted at 100% to reduce high stakes elements or redesign this assessment to make provision for two or more assessments.