CHAPTER 6

DESIGNING FOR LEARNING WITHIN AN INSTITUTIONAL CONTEXT

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EDITORS’ INTRODUCTION

Understanding the reality of how course design occurs is crucial to applying the principles that underpin designing for learning in technology-enabled contexts. Although a myriad of educational rationales and design tools are available, the process of designing for learning within a course setting is a complex process. While the primary aim of designing for learning is to create pedagogically effective courses, now teachers and learning designers are frequently being asked to do something much more ambitious – to design courses that contribute to a radical transformation of the curriculum across an institution. Can design for learning meet this ambitious aim? This chapter reviews how attempts to transform the curriculum have progressed and what we have discovered about how to support practitioners through such design processes. It makes recommendations for how the field of learning design could respond to institutional imperatives for radically redesigned, technology-rich curricula.

INTRODUCTION

In what David Watson (2013) described as these ‘manic’ times for higher education, where funding models and technological developments are in flux, the ability to generate and embed innovative course designs is crucial for universities aiming to transform their curricula. For many higher education institutions across the globe, reviewing how and what they teach has
become a core part of their strategic development (Blackmore and Kandiko 2012; Bain and Zundans-Fraser 2016). The attention being paid to the curriculum has been attributed to a wide range of changing demands including students’ increasing use (and expectations of use) of technology, outcomes-based education, and public accountability (Boitshwareloa and Vemuri 2017).

Higher education institutions are paying attention to the quality of their product (a global graduate, a networked citizen, a change maker) as well as the quality of their service (providing a high quality education). Those who conduct and support course design have seen a shift from a focus on how technology can enable learning, to technology as a driver for the attributes, dispositions and values required by 21st Century graduates (Beetham 2012; Barnett 2014). The integration of technology now has purposes beyond the questionable notion of ‘enhancement’ (Bayne 2014), such as the need for graduates with different skills, the expectation to compete in a growing online learning market, providing open access to quality resources or responding to changing student dispositions (Larnaca Declaration 2013; Bower 2017; Masterman Chapter 7).

As universities struggle to review and update their curricula ever faster, the pressures and stakes for learning design are increasing. In this chapter our interest is in strategic curriculum change, which we take to mean organisational level planning that involves reviewing the institutional mission, deciding how to respond, planning activities and allocating resources appropriately. In practice, this means the deployment of learning design frameworks and approaches across an organisation in pursuit of an institutional agenda. This chapter uses literature and case studies to question, identify and characterise the role of learning design in such situations. We assess if its methods and tools can be repurposed from ‘traditional’
course design to meeting other, diverse institutional agendas such as retention, employability and graduate attributes. We evaluate the scalability of those methods and tools. We ask how the field of learning design needs to respond to these changing priorities. We examine institutions where learning design has been part of a strategic curriculum change process and make recommendations for those supporting such ambitious, large-scale transformations.

SUPPORTING STRATEGIC CURRICULUM CHANGE

In line with other chapters in this volume, this chapter explores the problematic space between the intentions and actual practices of design (Agnostinho et al. Chapter 6; Masterman Chapter 7). The focus here is on design decisions that take place at the meso level, explained by Jones (Chapter 4) as decisions that can be taken by small groups such as course teams or departments. We would expect those decisions to be influenced by institutional strategic priorities. However, this relationship between strategy and practice is not straightforward. Kandiko and Blackmore (2012), in a detailed and comprehensive international study of strategic curriculum change, note that:

“it was striking that in all the institutions that we surveyed, interviewees at school level and faculty level rarely mentioned their institution’s priorities and initiatives in describing their own thinking and activities. Instead they referred to their own discipline and students” (p. 46).

The influence of the discipline on design practices was also highlighted by Masterman (Chapter 7) who found that the ability of teachers to incorporate the development of graduate attributes and skills into their designs was dependent on the alignment of these attributes with the expectations of their discipline. Bain and Zundans-Fraser (2016) dig deeper into this
concerning disconnect between strategy and design practice. Having reviewed the challenges to institution-wide curriculum reform, they conclude that universities ‘frequently lack the theoretical frameworks, institutional process, practice and collaborative cultures required to address the profound changes they face.’ (p.7). Given this analysis, we might expect that institutionally adopted and theoretically driven processes for team-based course design should help with these challenges.

A number of institutions have developed and promoted a particular learning design process, encouraging its use to design modules and programmes. Perhaps the best evaluated of these is Carpe Diem, an inter-disciplinary team-based approach to learning design involving academic course teams, learning designers, learning technologists, subject librarians, students and, where appropriate, employers (Salmon 2013). Originally conceived of as a team-building exercise, Carpe Diem was created and subsequently developed to facilitate the production of innovative, student-centred designs for online and blended learning (Armellini and Jones 2008; Salmon, Jones and Armellini 2008). Early evaluations provided positive feedback on its impact on course design and suggested that Carpe Diem can be an enabler for pedagogic change (Armellini and Aieygbayo 2010; Salmon and Wright 2014).

Supported learning design processes appear to be flexible enough to be repurposed to support different priorities. Young and Perovic (2016) claim that the ABC design process (see Resource xx) can be used to develop richer learning designs for blended learning and to integrate strategic initiatives such as digital skills or employability. Bennett (2015: 4) argued that such approaches should work for flipped learning and developing students’ digital literacies because they ‘support lecturer agency, locate development within academic programmes and by working in cross functional teams’.
Oxford Brookes University developed the Course Design Intensives (a variant of Carpe
Diem) and used it to support various institutional change agendas over a period of over 10
years, starting with blended learning and then creating versions for assessment redesign,
internationalization of the curriculum and embedding graduate attributes (Sharpe, Benfield
and Francis 2006; Dempster, Benfield and Francis 2012). Finally, the case study in Box 6.1
shows how CAleRO, another version of Carpe Diem developed at the University of
Northampton, enables course teams to design in line with the university’s strategic priorities,
including the explicit deployment of active blended learning aligned to the framework of
graduate attributes (Maxwell and Armellini 2018).

Although these examples appear to show supported learning design tools and processes being
put in place to achieve strategic curriculum change, other interpretations are possible.
Previously we have seen that common drivers for making use of technology in education are
pragmatic, e.g. increasing class sizes or needing to teach in a new context (Sharpe et al. 2006;
Oliver 2002). CAleRO could be seen as being prompted or encouraged by a pragmatic need
to redesign courses before the move to a new campus (Box 6.1). This example also shows
that institutional drivers for curriculum reform can include good learning design as an end in
itself, in this case, a focus on active blended learning.

Indeed, learning design can usefully be a ‘prop’ or starting point for better teaching practice
(with no guarantees), for optimal use of space, for focused staff development and for raising
the profile of teaching. Similarly, many of the team-based design workshops created to
integrate technologies into courses are underpinned by notions of constructive alignment (Biggs and Tang 2007) and Laurillard’s types of learning activities (Laurillard 2002). These fundamental design principles would be expected to improve the educational effectiveness of any course, and are undoutedly worthwhile, but are they sufficient to achieve strategic curriculum change? There has been criticism that approaches to learning design are not sufficient on their own to bridge the disconnect between pedagogy and the curriculum (Boitshwareloa and Vemuri 2017). An understanding of the organisational culture in which the changes are taking place is likely to be a key enabler of strategic curriculum transformation.

**ORGANISATIONAL STRATEGY AND CULTURE**

One challenge of repurposing these design approaches to meet strategic goals is the sheer number of priorities to which universities are simultaneously trying to respond. University curricula are currently expected to develop students’ subject knowledge, digital skills, employability, resilience and well-being, as well as aligning with institutional research themes, meeting government targets for widening access and progression, and taking account of student expectations for an inclusive, diverse and internationalised curriculum, high contact hours, fast feedback turnaround times and ubiquitous lecture capture. How can a large and complex institution plan for the changes required in response to such a diverse set of drivers?

The literature on strategic management reveals two possible approaches to strategic planning: a planned approach and an emergent approach. The planned approach makes use of structures, data and analysis and is well suited to a relatively stable and well-resourced environment. In such an environment decisions made at the top of the organisation on the
basis of data, go on to define which activities to resource, and what can be implemented throughout the organisation by following detailed plans. Such an approach has been shown to achieve change in learning and teaching in higher education (e.g. Thornton 2014 cited in Bennett 2015).

A second, emergent approach to strategic planning takes account of context, people and cultures (after Mintzberg 1994). Organisational culture is often defined as ‘the way we do things round here’ (after Lundy and Cowling 1996), and typically encompasses aspects of an organisation’s vision, values, norms, language, beliefs and habits, and how individuals behave. For Stacey (1992) the idea that strategic planning is responding to, or shaping the future of organisations is a fallacy. What leads to change is not some grand plan but what every individual in the organisation is doing. The patterns that emerge are the consequence of the actions of every agent in the system. Where the system is an organisation, the actions are the conversations between people. It is therefore not the planning process itself which results in change, it is the conversations that occur between individuals that determine how an organisation responds to the changing environment.

In the final review of the Jisc curriculum design programme, Beetham (2012) identifies that innovation was frequently held back by institution culture, myths and practices. It is here where rolling out learning design programmes can have an important role in bringing about change. Workshops that bring teams together to discuss design in light of complex and multiple strategic priorities, provoke and legitimise conversations about teaching and design in the 21st Century. It is these conversations between colleagues that often constitute an aim of learning design programmes (Box 6.2). Initiating or changing such conversations is part of their lasting effect (Box 6.1; Farmer and Usher 2018). Where these programmes can be
scaled up and rolled out across an institution, they have the potential to change what every member of a course team is doing and talking about.

CONSIDERATIONS FOR INSTITUTION-WIDE DESIGN FOR LEARNING

If we understand organisational strategic change as emergent, and teachers’ course design practices as situated in their disciplines, then this has implications for the way in which course design is initiated and supported in order to facilitate curriculum change. For example, it is likely to be important for curriculum design decisions to be made at the programme level by multi-skilled teams who are led by effective programme leaders (Locke 2012) or at the subject level where the subject leader is trusted as a change agent and disseminator (Box 6.1). The widespread adoption of team-based, programmatic learning design could help organisations achieve their goals because it changes what every working academic does. It shifts course design practice from an individual to a shared activity, and the conversations it promotes are crucial in changing teaching practice and academic culture.

Programme level designs

Much of teachers’ practice of designing for learning tasks considered elsewhere in this volume is at the level of the activity, sometimes the modules, rarely full programmes or subject groupings. However, for our students, their experience is one of the entire programme. To achieve curriculum transformation, a focus on the programme is more likely to impact on the ways in which students experience, learn and develop from the curriculum. One way of prompting a programme-level focus is consideration of graduate attributes, as
this requires a rethinking of the programmes towards their value to students after they graduate. Both institutions in the case studies have their own frameworks of graduate attributes and have used a team approach to learning design to help embed these into their programmes (Maxwell and Armellini 2018; Oxford Brookes University, 2015).

In the Oxford Brookes University case study (Box 6.2) it is interesting to note that programme learning outcomes were chosen as the unit of study for the evaluation. Why such a focus on learning outcomes? Learning outcomes are a critical, and often first step in the learning design process. As such, they need to ‘represent as much as possible the intentions of the curriculum and are expressed without ambiguity’ (Boitshwareloa and Vemuri 2017: 288). Well-articulated programme learning outcomes are important to current and prospective students, teaching staff, employers and professional bodies. They express what students are expected to be able to do by the end of their course, clarify for teaching staff what students must achieve, and enable the assessment process to become fit for purpose. These purposes for programme learning outcomes extend the role that intended learning outcomes play in a constructively aligned module (Biggs and Tang 2007). In the ‘double constructive alignment’ framework depicted in Figure 6.1, activities at the module level are derived from the specification of the programme, which is informed by strategic priorities and expressed in the form of graduate attributes.

In practice, the articulation of programme-level learning outcomes can be challenging. In an internal report of the graduate attributes project at Oxford Brookes University, the evaluators reported that:
It should be acknowledged that it is difficult for teams to articulate their expectations of students at a programme level. It is a challenge to adequately summarise the totality of the learning outcomes achieved by students from their modules without being overly general and abstract (Sharpe, Benfield, Corrywright and Green 2013).

In such cases, sharing examples of how generic definitions of graduate attributes have been contextualized for different disciplines has been found to be useful (see Resource xx).

**Designing in cross-functional teams**

As staff are increasingly busy, they are less likely to make time for formal development courses. It is notable that recent variants of Carpe Diem and the ABC workshops are all shorter (some down to two hours) and more flexible, with supplementary online activities, diagnostic needs assessments and online collaboration follow ups (Usher et al. 2018). Bringing together a team is a challenge but also encourages dedicated time to be set aside for the design work and for its validation as an acceptable academic activity (Aycock, Garnham and Kaleta 2002; Dempster et al. 2012). The time released from other duties is both a mark of institutional commitment to the work and genuinely useful in taking designs forward, as expressed by these CAIERO participants (Farmer and Usher 2018: 8):

I thought that while [CAIERO] might reveal some useful ideas, it was going to take up two days unnecessarily. Having completed the process, I became a convert.

One common finding from the evaluations of these staff development interventions is the value of bringing together different sources of expertise into an extended course team (Dempster et al. 2012; Armellini and Aiyebgayo 2010). The teams frequently bring in staff
who had not previously been engaged in course level design decisions: learning technologists, educational developers, librarians, students, experts in teaching from other faculties, artists-in-residence, and employers. The core teams acknowledged the value of working as part of multi-skilled groups (Dempster, Benfield and Francis 2012). Notably, many of the additions to extended teams are the ‘third space professionals’ identified by Whitchurch and Gordon (2013). Hughes (2014) argues that third space professionals are well positioned to mediate between support and academic staff and can therefore be influential in facilitating change. In order to improve their agility to shape future change, universities could build on the distinctive third space within higher education and the professionals that work within it. Third space professionals have more fluidity and flexibility within their roles and can move easily between university spaces and functions. They could be ideally positioned to take forward the development of curriculum transformations.

**Design as professional practice**

Course design has traditionally been a private and tacit area of work (Sharpe and Oliver 2013). However it has become clear throughout this chapter that the individual practice of specifying learning outcomes, activities and assessments, no longer accurately describes the experience of course design. When the driver for curriculum change is an organisational agenda, those engaged in course design have to deal not only with their own professional identity, but also with their role as sitting between institutional objectives and the student experience. Here course design, teaching practice and evaluation can be better understood as a social practices (Weller 2012). Designing within the context of the course is a form of professional learning, as individuals engage with the issues, conventions, resources and practices of their institution and discipline. The activity of design provides a vehicle for practitioners to develop their knowledge through application, in much the same way as
professional learning has been described in practice (Salmon et al. 2015; Ellaway Chapter 12). Designing in teams provides the opportunities for sharing ideas, building networks and crucially the dialogue that is a necessary element of both professional learning and institutional change (Falconer et al. 2007; Dempster et al. 2012).

**Culture and conversations**

Any university-wide approach needs to take into account how institutional and local cultures are likely to inhibit or enhance strategic curriculum change. Within higher education, where disciplines have strong shared cultures (Becher and Trowler 2001), it may be that there is a tension between strategic curriculum change and disciplinary and departmental cultures. Another challenge, eloquently argued by Stacey, is that the very existence of a strong, shared culture makes the organisation resistant to change. That is, members of the group tend to conform to their accepted ways of doing things, which can be adopted without negotiation or communication. Since any change challenges these taken-for-granted norms, change itself is resisted (Stacey 1992: 143-147).

Where strategic curriculum review requires change, tension in the relationship between strategic planning and organisational culture immediately becomes apparent. This is most evident during the implementation of strategy, which relies on the adoption of strategic decisions throughout the organisation. However, one of the features of the culture of universities is that decisions are made throughout the organisation - not just at the top (Shattock 2011: 46-9). The combination of the culture of dispersed decision making and the strong shared norms of the disciplines, means that the behaviour of individual agents in the system are likely to have a disproportionate effect in universities. The conversations between members of course teams may therefore have more influence on how the curriculum operates
than strategic decisions taken by academic leaders. It is important to understand how these conversations are likely to be influenced by organisational and disciplinary cultures, and therefore how they impact on the ability to conduct strategic curriculum transformation.

**Student engagement, experiences and expectations**

The final challenge considered here for managing curriculum change in the digital age is changing student expectations. It is now usual for teams to include students, or at the very least, to take into account the views and needs of students. A number of techniques can be used to encourage course teams to view their designs from the student perspective (e.g. storyboarding, “reality checking” and feedback provision), which are typically embedded into the approaches described here. However, student involvement can be difficult to implement in practice. In our experience, the value added by such involvement is variable. Although there has been much rhetoric about engaging students in curriculum design, moving to co-creation of the curriculum is demanding of staff and students, and needs to be undertaken with care (Bovill, Morss and Bulley 2011; Kay, Dunne Hutchinson 2010). Very little research is available on this aspect, although the evidence appears to suggest that such initiatives can substantially change lecturers’ assumptions about how and why students engage with the learning and teaching process (Brooman and Pimor 2015). This is likely to be particularly important for courses that make substantial use of technology, as a result of the myths and the multiple assumptions about students’ digital fluency that are often made.

Oliver observes that ‘Careful, empirical research of what learners actually do is largely absent’ (Oliver 2015: 367) and uses extracts from a year-long ethnographic project to argue persuasively that we need to understand the reality of students’ academic practices in order to be able to design learning activities, resources, spaces and tools for them. Gourlay and Oliver
(2018) drawing on the same research project, explain that superficial research can lead us to talk about binaries such as digital/paper, face to face/online, which are largely meaningless for students. Rather, learners are concerned with the real and more challenging components of the “blend”: mobility, accessibility, flexibility and choice. She warns that we are in danger of making grand-scale policy decisions about technology use without attending to what learners actually do. Institution-wide curriculum change needs to do more than involve students in workshops. It requires a commitment to investing in evaluations of learners’ experiences to inform new curriculum developments.

CONCLUSIONS

It is clear that contemporary higher education is facing numerous challenges, and that technological innovation is adding complexity to possible organisational responses. While the disruptive influences of technology have presented universities with potential levers for change, there are few examples of curriculum redesign operating successfully at scale. Universities have found it difficult to create conditions for conversations to challenge existing disciplinary cultures and design practices or to understand the changing expectations of learners in respect of technology.

This chapter has drawn on evaluations of university-wide interventions to offer advice for supporting teams through the process of designing for technology-rich courses within an institutional context. While there is not much evidence of impact yet, a shift in institutional approaches to designing for learning is evident. The process is now more team-based and more focussed on the subject area, the programme and the student experience. We have argued that such a direction for learning design is a good fit with an emergent view of strategic planning that sees change as occurring through conversations between individuals.
In order to achieve transformational curriculum redesign, the implementation processes need to take account not just of institutional strategy, but also of culture, and an understanding of design as social practice.

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