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**The development of 'design thinking' in higher education:  
an institutional analysis at the intersection of professionalism,  
management, and policy.**

**Graeme Wise**

A dissertation submitted to the University of Bristol in accordance with the requirements for award of the degree of Doctor of Social Science in the Faculty of Social Sciences and Law, School for Policy Studies, July 2020.

45,642 words

## **Abstract**

This study investigates the development of 'design thinking' within professional and managerial practices of higher education programme design, and the extent to which pressures from the policy environment influence or condition programme design practices. Design thinking concepts have grown in importance in the study of organisations and policy systems in which they are novel and unestablished. In recent years there have been trends indicating greater application of these concepts in higher education settings, albeit to a limited extent. The study tests theories drawn from the higher education management and design management domains, adopting a theoretical framework concerned with instituted practice, fields of action, and institutional logics. Empirical investigation was conducted through case study of the English higher education system with a principal period of interest between 2017 and early 2020, examining four university sub-cases. The four universities were selected to control for factors of both similarity and difference, enabling comparisons to be made. Within each university, semi-structured interviews were undertaken with a range of actors classified in three role types, allowing a range of perspectives to be analysed: senior managers, programme developers, and lead support staff. Across the four universities a total of twenty-two interviews were conducted, with participation obtained through a purposive, snowball sampling approach. The study finds that 'design thinking' has developed in some higher education settings, modifying but not displacing established practices. The modes by which it develops can be classified as 'systematic' or 'enabled', which have different institutional characteristics. Policy pressures on programme design generally appear to have only weak effects, but there are exceptions. A key finding is that the policy foundations of the established quality assurance regime have weakened, which has promoted programme innovation. Amendments to theory are offered, and possible future directions for 'design thinking' in higher education are discussed.

## **Dedicated to the memory of John Offord**

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### **Author's Declaration**

I declare that the work in this dissertation was carried out in accordance with the requirements of the University's Regulations and Code of Practice for Research Degree Programmes and that it has not been submitted for any other academic award. Except where indicated by specific reference in the text, the work is the candidate's own work. Work done in collaboration with, or with the assistance of, others, is indicated as such. Any views expressed in the dissertation are those of the author.

**Graeme Wise**  
SIGNED: ..... DATE: **28<sup>th</sup> July 2020** .....

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## Chapter One: Introduction

### 1.1 – Positioning the study

Universities are established organisations recognised globally for conducting teaching and research. The organisation of learning is a fundamental aspect of their teaching role, and this involves programme design. Programme design is a universal activity across all higher education systems, and what is generated – educational programmes or courses of wide variety – are some of the basic units of those systems. This study investigates programme design in higher education in relation to institutional factors of professionalism, management, and public policy. Despite the phrase ‘programme design’ being in common usage in higher education systems, the field of higher education studies has given relatively little theoretical attention to it and has not engaged to great extent with the underlying meanings the phrase connotes. At the same time, while connected fields of organisation studies, public policy, and innovation have increasingly considered the role of design, they have not greatly considered how these issues converge in higher education. This study was motivated by a desire to extend consideration of design in the study of higher education systems and to conduct an in-depth analysis of a sector where design approaches may be breaking new ground, possibly revealing new insights for how design can develop in organisations. This opening chapter repositions higher education programme design ‘as design’ and discusses that positioning in relation to the study of organisations, and the status of design within that field, with reference to higher education contexts and their specific institutional factors.

The organisation of learning is a very old and well-established thing. Programme design, in a general sense, has been going on in higher education settings for centuries. Arguably, something recognisable as programme design was enacted in first-century Rome when the scholar Quintilian set out a complete curriculum and pedagogic plan in his *Institutio Oratoria* (‘an orator’s education’), a guide to learning and teaching for rhetorical practice (Kennedy 2013). But while we could find common ground between ancient practice and contemporary practice, or practice at any time between them, it is also clear that education systems in any era have specific institutional characteristics. In the modern world, the programme is a formalised concept in higher education, and it is likely to be a key factor in shaping the entire student experience. It largely determines, for example, how often students must be physically present at the university, and precisely where, and when (in some cases, if at all). It will have a major bearing on students’ usage of learning resources and amenities, such as what points they most intensively visit the library, or want to meet a tutor, or need help from a students’ union representative. It may bear on how they use learning technology to support their

learning. The design of programmes may influence how positively or negatively students feel about their experience and the university itself – a key ingredient of this is that many students will liberally compare their experiences with each other, creating many mutual points of reference to reflect on them.

Given its centrality, it may be surprising that programme design has not been an especially hot topic for discussion within higher education practice or policy circles. It may be that it is considered obvious – a routine matter by which students take logical steps towards their learning objectives. But programme design is not ‘obvious’, and it is not ‘routine’. It is, rather, bound up in issues of what it is to be an academic professional, or a university manager. It is implicated in policy debates at the organisational level and the system level – debates for instance about what is taught and how things are taught, or about the balance between instruction and self-directed learning. Programme design is the front line of some of the most fundamental political battlegrounds in higher education. If students are consumers, then programme design plays a large part in shaping *how* they consume. If businesses and other organisations require particular advanced skills to create a productive economy and effective public services, then programme design may be at the end-point of any industrial strategy defined by government, or structures intended to align higher education provision to business and public service needs. As an extension of this, value for money, for the student or the taxpayer (whether individual or corporate), may ultimately be realised by effective programme design – or not. Every stakeholder in the system will bring a different meaning to the concept of programme design, and it will matter to them in different ways.

In this dissertation, ‘programme’ is taken to mean the principal structure by which student learning is organised in pursuit of specific outcomes (usually, but not always, academic qualifications). ‘Programme design’ is an organisational activity in universities that creates those structures, encompassing a range of practices, which may be professional as well as managerial, and distributed across university organisations. ‘Design thinking’ is the application, in those practices, of ideas, methods, and techniques, drawn from design traditions. These processes may operate in different ways and at different levels in the institutional system. There is a tension of meanings between the colloquial use of the term ‘design’ referring to any kind of programme creation activity, and a more intentional or critical usage. To speak of ‘design thinking’ in higher education is to suggest that practices of structuring learning are being approached in qualitatively distinctive way. These issues will be discussed further in the next chapter of this dissertation.



At this point it will also be helpful to add a note on some language points. In discussion of programme design, the nomenclature can become tricky – sometimes what constitutes a ‘programme’ versus other constructs (e.g. ‘course’, ‘unit’, ‘pathway’, etc.) is not wholly consistent within higher education systems, a problem usefully explored in a UK Higher Education Statistics Agency briefing paper entitled ‘*What is a course?*’ (HESA 2011). In this dissertation the terms ‘programme’ and ‘course’ are treated as synonymous, with other terms meaning sub-components of a programme. In addition, because the dissertation makes considerable use of institutional theory, this risks confusion with the commonplace term ‘institution’ used to mean ‘a higher education organisation’. To reduce ambiguity, the term ‘university’ will be used to refer to organisations, except where quoting another text or an interview participant. In doing this, it is duly acknowledged that not all HEIs are universities.

It is taken as a precept here that the activity of programme design in higher education is essentially compatible with fundamental definitions of design, rooted design theory: that is, theory explicitly situated in the discipline of design. Herbert Simon’s classic definition says that a designer is someone “who devises courses of action aimed at changing existing situations into preferred ones... the intellectual activity that produces material artefacts is no different fundamentally from the one that prescribes remedies for a sick patient or the one that devises a new sales plan for a company or a social welfare policy for a state” (Simon 1996: 111). John Heskett offers a broad definition of design as a “human capacity to shape and make our environment in ways without precedent in nature, to serve our needs and give meaning to our lives” (Heskett 2002: 5). There is considerable conceptual distance, however, between these fundamental definitions and design activity in practice. How people, organisations, and policies intersect in real-world situations is therefore central to any research effort in this area. This directs attention to how programme design in higher education systems can be approached through the fields of professional activity, organisational management, or policy environment, or a combination of them. Paul Trowler (2002) vividly characterises the relationship between these fields as a dynamic of “intentions and outcomes in turbulent environments”. This captures very well the essence of the challenge of analysing practices that operate across multiple fields of action. By considering a range of design, innovation, management, and policy theories, and testing some of those theories, this dissertation aims to explore a new way of studying the underlying institutional factors in programme design.

The potential utility of looking through a design lens for insights into matters of organisational management, public policy, and system performance, has been increasingly recognised in recent times – both in terms of real-world practice and scholarly inquiry. Analysis and application of ‘design thinking’ has become a subject of considerable interest in wider

scholarship relating to and public management and innovation (e.g. Hobday, Boddington, and Grantham 2011; Bason 2010, 2017; Junginger & Sangiorgi 2009, 2017; Dunne 2018; van Buren et. al. 2020). Others have sought to extend the utilisation of design principles in many diverse sectors and contexts (e.g. Brown 2008; Cross 2011; Liedtka & Ogilvie 2011; Manzini 2015). Despite this turn to design in many quarters, especially considering how it has become popular in work concerning various public and quasi-public service sectors, there has been only limited and sporadic application to higher education as a specific institutional context. Hassi and Laakso propose an agenda for research to improve the integration of management and design scholarship in novel situations, set out in the following terms: “1. Link the elements of design thinking as described in the management discourse framework to the research conducted within the design discourse to evaluate their validity and deepen the understanding of what these elements entail... 2. Interpret what the elements mean as management practice; can design thinking be applied to fields beyond the traditional design profession, and if yes, how?... 3. Study whether the application of design thinking in management practices produces better results, compared to a non design thinking approach, and if yes, under which conditions?” (Hassi & Laakso 2011: 9). The dissertation broadly follows the first two elements of this agenda regarding novel applications in a higher education context.

The question arises as to why we should consider higher education in terms of design. One reason is that as higher education systems have transitioned to being “mass systems”, such expansion and scale brings considerable system organisation and delivery problems (Trow 1973). These problems may be amplified by increasingly complex market dynamics, alongside growing expectations that they might help to solve a range of social and economic problems. Programme design may be crucial to the way a university positions itself in the market, its attractiveness to potential students, and the extent to which it can innovate in relation to curriculum, pedagogy, and the student experience. At the same time, programme design in higher education can also become politically charged. Recent examples include a surge of student activism in South Africa, which called for radical curriculum reform in the context of a post-apartheid higher education system (Booyesen 2016). In another case, student societies have campaigned for revision of the economics curriculum, regarding it as too limited in a world after the global financial crash of 2007 (Feraboli & Morelli 2018). Modes of delivery can also be politicised – as in England, where ministerial speeches and media commentary have examined issues like ‘contact hours’ and the potential for so-called ‘accelerated’ programmes (where, for example, a degree is studied over two years instead of the normal three). Buchanan (1992) discusses the potential for design approaches to help solve multi-faceted “wicked problems” as they arise in sectors or society at large, arguing that there are attributes particular to the design approach that make it highly suitable for the kind of flexible, imaginative

solution-making required to address such problems. And while taking a design approach might initially be regarded as a regimented and technocratic way to approach problems, Cross (2011) argues that actually it is not primarily a technical process but rather a social process, in which competing interests, values and perspectives can be drawn out and reconciled.

Recently there have been more explicit applications of design thinking methods and techniques in relation to higher education settings. One of the most prominent examples is the Hasso Plattner Institute of Design at Stanford University – this institute, commonly known as ‘the d.school’ has a wide remit to apply design thinking in many sectors, but has specifically set out to extend its work into higher education, claiming the possibility for improvement in learning and teaching (<https://dschool.stanford.edu/>; also Gardner 2017). Panke (2019) conducts a systematic review of the subfield of ‘design thinking in education’, finding that scholarly publications in that subfield have increased from five in 2010 to steadily more than twenty per year since 2016. These publications include a mixture of design thinking being used to develop programmes and design thinking being introduced into the curriculum within programmes. The work on programme development itself has different points of focus. Mackh (2018) has based his recent guide to practice explicitly on a design thinking model. Bason (2017) cites a case study of the application of blended service design methods to programme development in a Danish college of higher education. Other authors have considered specific techniques. One key design method is service blueprinting, which Baranova et. al. (2011) and later Radnor et. al. (2014) explore through substantial case studies in a UK university. Desrosier discusses the use of rapid prototyping for new programme development at a university in California (Desrosier 2011). Andrews and Eade examine the use of student journey mapping in higher education, a version of the established service design approach of user journey mapping (Andrews & Eade 2013). Such examples indicate it is possible that design thinking is on the cusp of becoming more widely adopted in higher education practice, and these developments warrant further investigation.

### *1.2 – Summary of the theoretical focus, research questions, and research methods*

The development of design approaches and methods in organisations have been theorised with claims for their potential to change organisational practices and support innovation, and possibly to provide possible alternatives to the paradigm of New Public Management (Bason 2017; Junginger & Sangiorgi 2017; Dunne 2018; Kurtmollaiev et. al. 2018). This kind of change in practice could be promoted and developed within universities through changes in professional and managerial practice. However, any greater use of design to shape learning and teaching is not wholly in the hands of academics or university managers – it can only

happen in interaction with the policy environment, which may drive forward or impede its progress. However, several scholars take a view that, despite the alignment of New Public Management and policy trends, action on higher education systems through policy pressure tends to have only weak effects, especially in matters of core academic activity, which may limit the extent to which the policy environment might condition or influence programme design practices (Clark 2004; Kogan et. al. 2006; Seeber et. al. 2015; Bleiklie, Enders & Lepori 2017).

This study aims to contribute to debates around organisations, management, and the integration of design thinking, by examining higher education programme design activity in the context of one contemporary national higher education system, responding to two research questions:

- In what ways, and to what extent, have design thinking approaches developed within professional and managerial practices of higher education programme design?
- To what extent do pressures from the policy environment influence or condition programme design practices?

In doing this, the study will connect and test explanatory theories approaching these issues from different research domains, principally Kurtmollaiev et. al. 2018 and Bleiklie, Enders & Lepori 2017, but also with reference to related theories. These theories will be discussed at greater length in chapter two. The study then reports an empirical investigation of recent development of programme design practices in four universities in England. This is structured taking the national system as the main case and four universities as subsidiary cases, selected to enable representative findings from organisations with characteristics of interest, as well as useful cross-comparison. The main method of inquiry was semi-structured interviews with twenty-two participants drawn from the four universities, identified through purposive, snowball sampling. The English higher education system has recently experienced a very high degree of turbulence, in terms of inter-related factors of policy intervention and market dynamics, constituting a rapidly transforming operating environment. The environmental factors that are considered as possible influences on programme design practice are explained in more depth later, but for the purposes of illustration, they include:

- Removal of student number controls, increasing the intensity of competition in the undergraduate recruitment market

- Creation of a new statutory regulatory framework and organisation – the Office for Students – which has established programme design as a key regulatory issue and set up a new audit approach for universities based primarily on metrics
- Establishment of a compulsory performance rating and awards system directly aimed at learning and teaching – the Teaching Excellence Framework
- Change in the structure and statutory basis of higher education quality assurance, increasing the purview of the new regulator vis-à-vis sector-owned quality oversight
- Strong government encouragement, in some cases supported by special project funding, for new initiatives in Science, Technology, Engineering, and Maths (STEM) provision

The study proceeds as follows. Chapter two is an extended literature review that further defines what it means to examine ‘design thinking’ in the context of higher education, and then situates higher education programme design within a theorised institutional framework comprising professionalism, management, and the policy environment. In doing so it expands discussion of the references cited above alongside a broader range of relevant literature. The chapter concludes by positioning the research questions in relation to key theoretical debates and shows which theoretical models are being tested in the study, and why. Chapter three discusses the methodology for investigating the research questions and outlines a detailed research protocol for implementing that methodology. Chapter four provides a narrative description of the main case landscape and introduces the four universities to be examined as sub-cases. Chapters five and six report in-depth analysis of data pertaining to the research questions, and present findings. Chapter seven relates these findings to the existing literature in a theoretical discussion. Chapter eight concludes the study and indicates possible future directions for design thinking in higher education.

## **Chapter Two: Situating ‘design thinking’ in higher education**

### *2.1 – Chapter introduction*

This chapter presents a survey of existing literature in several fields relevant to the research questions and situates higher education programme design in relation to theories concerned with the institutional configuration of universities. The first section expands on the positioning of the study in the context of organisational and institutional theory, and further develops the working definition of ‘design thinking’ offered in the introductory chapter. The discussion then moves on to consider design thinking firstly in relation to pedagogic professionalism within universities and then in relation to the external environment, constituted as a complex environment of market and policy pressures, with special attention to issues of market innovation and policy implementation in higher education systems. The organisation of these sections is guided by Clark’s (1983) model of higher education system co-ordination. The section that follows will bring together various strands of the discussion, focusing the inquiry onto how design thinking might be mobilised in the institutional framework by actors in the system, especially in terms its status in debates about public management. The final section summarises the discussion and restates the research questions, with added commentary on how they stand in relation to the objectives of theory testing and theory building.

### *2.2 – Defining the design thinking concept in relation to institutional theories*

This dissertation considers programme design as a domain of practice in the context of universities as organisations and how they function institutionally. It treats the university as an organisational form that is recognisably distinctive but also diverse, which is remarkably stable over time in some respects, while in other respects it may be transforming (Meyer et. al. 2007). These dynamics can be conceived as the interplay of a particular configuration of institutional logics and fields (following Thornton & Ocasio 2008; Fligstein & McAdam 2011; Scott 2014), which will be discussed further here. In recent years, these institutional theories have developed a greater role in higher education research (Seeber et. al. 2015; Bleiklie, Enders & Lepori 2017; Bastedo 2009; Shields & Watermeyer 2020), and at the same time they have come to have a greater role in studying design in organisations (Kimbell 2011, 2012; Kurtmollaiev et. al. 2018). These foundations will now be discussed, first in terms of the philosophical framing of the research questions, and then later in terms of addressing the problematic definitional issues in relation to design thinking.

Thornton and Ocasio (2008) consider different theoretical conceptions of institutional logics and attempt to state a meta theory that unites them: “to understand individual and organizational behavior, it must be located in a social and institutional context, and this institutional context both regularizes behavior and provides opportunity for agency and change” (p.101-102). It has been further argued that the social and institutional context of a university is specific, that it has both historical contingencies and characteristics in the present that make it identifiable as a distinctive kind of organisation in society (Musselin 2006; Meyer et. al. 2007). An institutional logics perspective has not commonly been adopted in higher education studies but has recently received more attention (Cai & Mehari 2015; Lepori 2016). Drawing on this branch of theory, Bleiklie, Enders and Lepori (2017) argue that logics associated with academic professionalism are increasingly challenged by a new market logic and a reformulated bureaucratic logic, with professional logics being supplanted by new logics or sometimes being co-opted by them. Shields & Watermeyer (2020) survey the values of UK academics, positing the university as a field in which logics of autonomy, utility, and managerialism compete.

Building on theory developed by Fligstein & McAdam (2011), Sandfort and Moulton (2015) deploy the concept of ‘strategic action fields’ to show how actors in the domains of system policy, organisations, and front line professional activity coordinate at those levels in distinction from each other, and through their own domain-specific actions, produce change. They present strategic action fields as spaces of confluence between the different influences of the “legal and regulatory environment”, “market conditions” and “cultural norms and values” (Sandfort & Moulton 2015: 86-96). This is analogous to Burton Clark’s triangle of coordination theory of higher education systems (Clark 1983), in which system change is understood as an ongoing co-ordination between the values and traditions of academia, the demands of markets of various kinds, and the priorities and rules set by states. The triangle heuristic helps to show how the immediate pressures and signals acting on programme design activity may be market-oriented (in relation to labour markets, employer expectations, and students’ hopes for rewarding careers), but in the contemporary economy these markets may also be shaped by the policy environment, and governments may also seek to impose policy initiatives with specific aims and goals in view. Clark’s theory is also a way of understanding change in higher education systems – how far they move over time between the three key forces of co-ordination. These are compatible models, but while Clark ultimately deployed his model to reinforce the notion of “entrepreneurial universities” (Clark 2004) as the primary (and, he claimed, probably most effective) change drivers in the higher education system, Sandfort and Moulton utilise their model to demonstrate how implementation of public policy (i.e. policy promulgated by governments) can be made more effective. It is also important to consider that

strategic action in any field may have the intention to conserve as well as to change. It may be that for every course developer, university manager or policy leader who wishes to provoke radical pedagogic innovation, there may be another who wishes to retain and promote traditional methods and approaches.

Kogan et. al. utilise the concept of field analysis “where a field is an institutionalised area of activity where actors struggle about something that is of importance to them” and go on to remark that “while admitting the obvious existence of a formal hierarchy, we seek to retain an analytical openness that is particularly important in a field of social life where multiple forces so clearly work together in forming the system” (Kogan et. al. 2006: 11). Higher education is unusual in that it has governance structures running through organisations (not one corporate board, but many boards and committees of influence), and an innate culture of criticality that means management processes are likely to be routinely questioned by a large number of people inside the organisation, leading to what Temple (2014) has called “incommensurability” – a need to reconcile competing interests without over-reliance on centralised management. Recently, a major multi-method research programme, *Transformation of Universities in Europe* (TRUE), concluded that universities possess corporate rationality and hierarchy, but in differing balance depending on diverse traditions in higher education systems and the public policy directions prevailing in differing national operating contexts, also acknowledging that relationships between professionalism and management within organisations and with the policy environment are highly complex (Seeber et. al. 2015; Bleiklie, Enders & Lepori 2017). In different ways these authors have engaged with the question of how the institutional configuration of universities relates to trends in managerial practices, especially in relation to the rise in higher education systems of New Public Management and its implications for instituted academic practices, values, and norms (Bleiklie 1998; Marginson 2008; Musselin & Teixeira 2013; Broucker & De Wit 2015).

Lucy Kimbell (2012) proposes a theoretical construct that allows us to bring design into this picture. She calls for a conception of “design-as-practice” which acknowledges the socially situated nature of design activity in organisational contexts, suggesting that this “mobilizes a way of thinking about the work of designing that acknowledges that design practices are habitual, possibly rule-governed, often routinized, conscious or unconscious, and that they are embodied and situated” (Kimbell 2012: 135). She couples this with a balancing conception of “designs-in-practice”, which demands consideration of how the results of design activity only become fully realised in contact with their users – this too is a social process. The special relevance of this theorisation to the present discussion is that it offers a way of taking on the integration of design concepts into organisational situations and contexts which have had no



prior association with them, where practices – social, professional, managerial – are already deeply complex, embedded and dynamic before ‘design thinking’ even arrives on the scene. This certainly describes the organisational context of the university. Kurtmollaiev et. al. bring together institutional logics with the concept of institutional work (Lawrence & Suddaby 2006) as a theoretical tool for understanding how practices are reconfigured when service design approaches are intentionally brought into organisations where it is novel and unestablished, arguing that “this service design based institutional work necessarily induces the process of organizational logic transformation” (Kurtmollaiev et. al. 2018: 61). Furthermore they say that the existing pattern of logics has a strong effect on what service design comes to mean when realised in a given organisation: “the effects are bidirectional, as the organizational context has a considerable impact on service design as an innovation practice” (Kurtmollaiev et. al. 2018: 59). We will return towards the end of this chapter to matters concerning the integration of design with university management – a potential convergence which represents a central issue in this research project.

These theorisations have implications for how we define ‘design thinking’. In the introductory chapter, this was defined as the application in organisational practice of ideas, methods, and techniques, drawn from design traditions. However, what this means is not straightforward, and design scholars have adopted so many different philosophical starting points that a problem of polysemy in design thinking as a concept (or set of concepts) has emerged. Brown (2008) provided a seminal definition: “put simply, it is a discipline that uses the designer’s sensibility and methods to match people’s needs with what is technologically feasible and what a viable business strategy can convert into customer value and market opportunity” (p.2). Bason elaborates on this, saying that design thinking can be characterised as *either* a merging of design sensibility with real-world possibilities *or* as an ability to navigate between analysis and synthesis (Bason 2010: 138-139). Buchanan (2016) identifies at least four possible meanings of the term, saying that it has been defined variously as a cognitive process, an imaginative act, a spirit of innovation, and a discipline or habit. These are just three examples among many, but they aptly demonstrate the problem: while definitions abstracted from the philosophy of design might be valuable, they can suffer from over-complication and a lack of common ground, and they can be hard to apply to empirical questions. Micheli et. al. worry that design thinking is “at risk of being untenable if there is insufficient clarity and coherence about the construct’s constitution and its effects” (2019: 125-126). Before proceeding much further, we need to consider to what the concept means in relation to this project.

There are different ways to address these problems. One way is to narrow the parameters to develop a clearer functional definition. Micheli et. al. conducted a systematic review of relevant

literature with a view to establishing a unified understanding of what the term ‘design thinking’ means, so that it can be more rigorously used in both research and practice (Micheli et. al. 2019). Through this review, they derive ten “key attributes” of design thinking, and eight “essential tools” used mobilise those attributes in organisational settings. Their model includes attributes such as: creativity and innovation, user-centredness and involvement, iteration and experimentation, interdisciplinary collaboration, and a gestalt view (seeing the whole picture). The model also includes practical tools such as visualisation, persona development, user journey mapping, and prototyping. This represents a highly coherent but somewhat parsimonious account of design thinking that excludes certain methods these authors say are strictly more properly attributed to other approaches, including scrums, sprints, and user voice research. However, they do say that “additional research should further explore the differences, similarities and synergies between design thinking and other methods and processes” (Micheli et. al. 2019: 145-146). However, following Kimbell’s model calling for analysis of design activity through the lens of practice, and in keeping with the theoretical orientation of the dissertation, we can also consider a definition of ‘design thinking’ that treats it institutionally. This is to say the concept takes its meaning from the attributes ascribed to it in practice by the actors in the institutional system under investigation. How those actors conceive of design thinking, mobilise it, and derive value from it, are the factors that determine what it means. Adopting such a conception is not a way to avoid building a definition, it is a theoretically underpinned move which argues that abstract definitions may not be useful for understanding the phenomenon as it emerges in situated contexts. As Kimbell puts it: “By focusing on situated, embodied material practices, rather than a generalized ‘design thinking’, we may shift the conversation away from questions of individual cognition or organizational innovation. Instead, design becomes a set of routines that emerge in context” (Kimbell 2011: 300). For Kimbell, it does not matter if we call this ‘design thinking’ or not – what matters is how it is instituted in practice.

These are polarised ways of approaching the definitional problem, and both are useful for this study. We can use the more functional account as a locating device, at first instance taking design thinking as the utilisation of a recognised set of methods and techniques. This might include a blend of user observation, user voice research, iterative development, personas, journey mapping, brainstorming, prototyping, sprints, or related techniques. This broad range of methods and techniques may fall outside more restrictive definitions of design thinking (e.g. Micheli et. al. 2019), but they represent a group of cognate practices that, if applied in higher education settings, would amount to a distinctive design approach qualitatively different from established practice. However, in testing theories concerned with the development of design thinking in universities, the way in which professionals and managers have themselves defined

and given shape to these methods and techniques in their own context will become a central part of the analysis. Hence it is expected that we will increasingly utilise the practice-centred approach as the analysis proceeds. This does not mean dispensing with the functional account entirely, and it will continue to help maintain a focus on the research questions when handling a large amount of data in which a very wide variety of practices may be apparent.

### *2.3 – Design thinking and the pedagogic profession*

Although creating any higher education programme clearly requires planning and development activity to take place, long-established practices for doing this have not corresponded to the characteristics of a design thinking approach. Tight (2012: 65-82) provides a comprehensive survey of the higher education studies field, finding that “course design” (to use his term) is a popular theme for higher education research. Tight treats this as a category separate from learning and teaching, quality assurance, and the student experience – though he does separately give specific coverage to “the on-course experience” (Tight 2012: 86). These accounts can be very tightly focused: in many cases, the question of programme design is narrowed to focus on creating individual modules, such as in Butcher, Davies & Highton (2006), Medicott (2009), Binns (2017a; 2017b). Tight’s survey reveals that in many cases this work is primarily technical, offering guides to practice in programme design; Tight calls this the “how-to genre” (Tight 2012: 57). One comprehensive treatment specific to design at the programme level is provided by Toohey (1999). Toohey’s account is theorised in institutional terms, discussing how “beliefs, values and ideologies” underpin course design, and in higher education tend to fall into five groups: discipline-based, performance-based, cognitive, experiential, or socially critical (p.44-69). Toohey presents a model of the course design process, which we might regard as a standard model of established practice. Neither the foundations nor the process model feature concepts associated with design thinking.

Guides to practice are an important way in which practices are codified and practitioners give each other advice about how to do programme design. They show that there are technicalities specific to higher education to bear in mind, which can affect the coherence of ‘the programme’ as a structure. For example, while students always follow programmes over an expected duration – whether that be a matter of weeks or years, they might also vary the duration and follow their programme with greater or lesser intensity. Programmes typically involve student assessment, either at its culmination or throughout; performance in assessments may cause students to vary their programmes, or to conclude them early. Programmes are often (but not always) modular in form – broken into discrete sections of differing points of focus, duration, and pedagogical approaches. Guides to practice also by their nature represent an established

approach in higher education that tends to treat the programme development process as segmented (often with individuals separately developing different programme elements), with the classroom experience separated from other aspects of the learner journey, and with a high level of consistency with existing programme forms, structures, and pedagogic methods. While at some level the established practices might be 'creative', they do not have the same kind of disciplined creativity, experimentation, broad scope across the whole user experience, and inter-functional collaboration all entailed in a design thinking approach. It is the combination of a range of specific techniques rooted in that approach which makes the approach qualitatively different from other 'tried and tested' practices.

The problem of positioning design thinking in organisational settings where it would be novel or atypical has been theorised. Gorb and Dumas develop the concept of "silent design", conceptualising how a design activity may occur covertly in organisations. They outline three propositions to structure the problem: one, that design activity appears to be widely dispersed in organisations; two, that design is very interactive and cuts across many traditional function areas; three, that design activity is frequently not classified as such within organisations, or there is little consistency of classification (Gorb & Dumas 1987). Others have attempted to decipher this problem through the lens of professionalism. Ezio Manzini describes "two poles of *diffuse design* and *expert design*, where *diffuse design* is put into play by 'non-experts', with their natural designing capacity, while *design experts* are people trained to operate professionally as designers, and who put themselves forward as design professionals" (Manzini 2015: 37, emphasis in original). Looking at the healthcare sector, Roberts and Macdonald (2017) draw a contrast between "designerly" practice and "design-like" practice which is exercised by professionals who have never undergone any formal design training.

There have been several contributions to the literature that help to bridge the gap between different practices and traditions. Ashwin et. al. are insistent on the importance of design in pedagogy in a general sense, writing: "there is nothing haphazard about effective teaching and learning. The curricula of the modules and programmes we teach need to be explicitly designed to engage our students with valuable knowledge" (2015: 70). They are equally clear that this is desirable at the level of entire programmes of study, not only their components in isolation in a modular form, and should be a collective effort: "ideally curriculum design starts at the programme level and is undertaken by the programme team or all those contributing to a programme as opposed to a sole individual" (2015: 164). They acknowledge, however, that this will often not be the case in reality – especially in relation to redesign of existing programmes. In these circumstances they advocate at least interrogating whether the range

of individual modules contributes to a coherent set of student learning outcomes at the programme level.

Fung (2017: 53) goes further than this – in setting out her vision for a “connected curriculum”, one key dimension is that programmes must have a “throughline” to fully succeed. This entails “creating a related sequence of opportunities for research and enquiry”, “promoting students to make conceptual connections between apparently disparate elements”, and “enabling students to develop a clear picture, or narrative, of their overall learning journey” (p.53). Fung contends that “a well designed mandatory sequence of core activities, for all students studying on a particular programme... can achieve all three of these challenges” (p.53). She says that this can be hard to achieve in modularised systems, especially where students are given a lot of options to choose from. The balance between giving a programme clear and predetermined contours and features to achieve coherence, versus giving students choice in the hope or expectation they will ‘make their own’ coherence, is a fundamental design problem. Similar dilemmas arise in relation to pedagogical choices (e.g. wholly face-to-face, versus delivered in a blend with online techniques), or student assessment (how much, when, and what form?), to take just two examples. These problems also signify a higher-order problem – how best to understand student needs, and how best to shape programmes around them.

In Europe, a long-term movement in the learning and teaching subfield towards an approach known as ‘student-centred learning’ (SCL) can be seen as a response to these challenges. Extensively charted by O’Neill and McMahon (2005), they find that SCL can have many definitions and can absorb a lot of concepts, but imprecision about how it should be done leads to problems of implementation. One factor, however, that seems common to all SCL-type approaches is the centrality of student choice, which potentially puts it at odds, at least in tension with, the proposals made by Fung. Reigeluth et. al. (2016) provide a similarly extensive survey of parallel developments, rooted more in American education systems, is the expanding subfield of ‘instructional design’ based on a ‘learner-centred paradigm’; this is also a long-term, multifaceted project with many different contributors and different points of focus, but all with a commitment to the personalisation of educational experiences. Student centred learning and instructional design may seem to evince similar core ideas, but they are actually very different from each other in terms of their origins and the frameworks they set up: ‘choice’ and ‘personalisation’, for instance, are not the same thing. These are also each such capacious agendas that it can be difficult to pin down quite what they are advocating in concrete terms.

There are some signs that design thinking is starting to permeate higher education scholarship in a much more explicit way. Diana Laurillard (2012) has provided perhaps the most clear and comprehensive theoretical vision for integrating foundational education theories and design theories. Influential design theorists, such as Herbert Simon, are among her points of reference. Laurillard ultimately proposes a model based on “pedagogical patterns”. This is a very sophisticated model, directed at practice, which calls for the development of a kind of common ‘blueprint’ for programme designs, documenting in detail all their properties in relation to learning outcomes, pedagogic methods, technologies of delivery, and other resources – aiming to provide practitioners with: “(i) a principled way of designing and testing the improvements in their practice, (ii) a way of representing and sharing their pedagogic practice, and (iii) a way of relating outcomes to the rationale and elements of their design” (2012: 215). By contrast, Laurillard is frustrated by the enormously wide range of perspectives in the student-centred learning and instructional design subfields and the lack of common theoretical ground between them (Laurillard 2012: 67), suggesting this is not helpful to practitioners.

Programme design is not ‘silent’ or ‘covert’ within universities, and it does not meet the third of the Gorb and Dumas propositions; on the contrary it is overt and often explicitly described as design. Those engaged in higher education programme design may be to all intents and purposes designers like any others; but they may not think so, or even contemplate this possible connection in their practice. One way of situating higher education programme design practice, then, is to see it as positioned somewhere on a line between Manzini’s two “poles” - it is professional activity in which design might be acknowledged as an element of professionalism, but not in a way that a graduate from a design school would immediately recognise. There have been some common points of reference for both design professionalism and educational professionalism, such as Schön’s *The Reflexive Practitioner*, which explores design as a “reflective conversation with the situation” that professionals engage in during the course of their practice (Schön 1991[1983]: 76). This work has proven seminal in higher education as a touchstone for learning and teaching, including programme design (Barnett 1997; Cunningham et. al. 1998; Wenger 1998; Light et. al. 2009; Ashwin et. al. 2015). The Roberts and Macdonald model may also be useful here in allowing for transition and change in the tenets of practice in higher education settings such that it may become, over time, more “designerly”. Some examples of where this has already been observed were cited in the introductory chapter (Baranova et. al. 2011; Radnor et. al. 2014; Desrosier 2011; Bason 2017; Mackh 2018; Panke 2019). Such a change of direction will however be highly contingent on interactions with market and policy pressures.

## *2.4 – Programme design in ‘turbulent environments’*

In evaluating the development of design thinking in higher education, we need to consider the issue in relation to external market and policy factors. Programme design occurs under a range of pressures and influences, both internal and external to the university. Trowler (2002) writes of “turbulent environments” for higher education in which “examples of mutually contradictory policy initiatives are legion” (p.13). Toohey discusses “pressures for change” in the design of programmes, in her account deriving largely from technological development and greater demands from employers of future graduates (Toohey 1999: 4-20). Binns writes that “academic staff are receiving different signals from students, the institution, external stakeholders, and future employers... degree programmes and the modules within them need to be marketable, sustainable, attractive and academically challenging” (Binns 2017a: 828).

If a higher education system moves more definitively towards market-based system co-ordination, then providers in that system may need to innovate more heavily to remain competitive in the market, or at least to give the impression to applicants (and others with an interest) that they are innovating. In this respect, programme design may have a very important place in the process, because programmes constitute the basic unit of the offer made by universities to the market, in terms of student choice. Programme design can thereby be understood as a key process that underpins the creation of offerings to the market, and is also an integral part of the system of certification and qualification to which employers and others will have regard in labour markets. The shape of the programme portfolio offered is likely to be very influential on how a university is positioned in the market, and the way programmes within a portfolio are designed may be germane to its attractiveness. Temple (2014) suggests this may form part of a university’s “hallmark” - bound up in issues of brand (and positioning that brand) amongst a wide range of alternatives.

The relationship between innovation and design is complex. Looking broadly at the behaviour of firms across multiple economic sectors, Hobday, Boddington and Grantham observe that “within innovation studies, the role of design in business is primarily viewed as a technical activity, rather than as a strategic activity of wider relevance to management” (2011: 9). Their wider case is that the central role of design in both product and process innovation is poorly understood and recognised, and there is little insight for firms of any kind looking for improvements in how they utilise design, ultimately calling for a research agenda that synthesises the analysis of design and innovation. Mortati says that the often “silent dimension” of design identified by Gorb and Dumas plays directly into its low status in innovation, such that “managers have often handed its activities over to unqualified or non-

recognized personnel” (Mortati 2015: 7). The *potential* for design to play a key role in higher education innovation, if it can be grasped, has also been theorised. Heskett’s theory of design in terms of value creation posits design as a fundamental factor of production alongside labour, capital, and technology (Heskett 2017: 176-180). Heskett argues that design must be strategic if firms are to achieve competitiveness, because this gives it the capability of bringing user knowledge and user experiences into the production process and the value chain. But he also cautions that “for design to function as a strategic instrument, a credible case must be made for its capabilities in organizations prepared to use it in such terms” (2017: 60). Crow and Dabars (2015) envisage a complete transformation of universities based on design principles and argue how this could be done. Schmiedgen et. al. (2015) carried out survey research, finding that integration of design thinking into organisations had strong positive effects on working culture, innovation processes, and relationships with users. In principle, it is argued, design could be a way to strengthen innovation.

In higher education contexts, however, there are significant barriers to achieving such objectives. The attitudes and techniques involved are not widely understood, and their applicability to programme-shaping activities within universities is not well established. There is a sparsity of people in the higher education sector with true designerly knowledge at senior levels of management and leadership, so the number of people who might be in a position to really make a credible case for an organisational strategy rooted in them is likely to be very restricted. While academic staff are highly qualified in relation to disciplinary knowledge and research, they may not be prepared for design thinking as a matter of organisational strategy, or for other innovation practices. There are also important differences connected to discipline specificity, market position of the university or department, and the extent to which a programme area has a long history or tradition. If a programme area maintains a high ratio of applications to places there may be little pressure to innovate, at least not pressure emanating from market factors. For some fortunate universities, this will constitute most of their portfolio, but for others it may seem necessary to be seen as constant innovators, offering the newest things. In some subject areas, explicit adherence to a highly traditional curriculum and pedagogy may be a central part of the marketing *cachet*.

The disconnect between design and innovation at the strategic level may become more acute and more problematic in those higher education systems which are increasingly driven by market dynamics, with intensified demands for innovation in programme portfolios. There may be no intuitive move by university managers to reach for design as a tool for supporting programme innovation, because it does not have sufficient standing in existing practice, and because prominent accounts of learning and teaching innovation in universities have little



connection to theories of design (e.g. Hannan and Silver 2000, Brennan et. al. 2014). In their significant account of disruptive innovation in higher education, Christensen and Eyring (2011) refer to design at a surface level, but do not utilise it in depth. In a similar vein, Barber, Donnelly and Rizvi (2013) argue that innovation in higher education will be driven through an “unbundling” of its various functions and a much greater role for online delivery – they say this will enable programme to be completely redesigned, but say little about the design process that might underpin that transformation. Tierney and Lanford (2016) analyse multiple dimensions of innovation in higher education including creativity, novelty, entrepreneurialism, sustainability, and disruption, but they do not regard design as an important dimension. Tierney and Lanford’s account also goes further than others in acknowledging the important role that the policy environment can play in shaping the higher education market, and the conditions for programme innovation.

What constitutes ‘the policy environment’ is complex and multifaceted. It includes central government departments, led by politicians, who may bring explicit ideological and political initiatives to bear on the system. But this is only a limited, if often powerful, part of the policy environment. There will also typically be a range of agencies and bodies carrying out statutory functions in relation to higher education that have been assigned to them – for example this might include funding universities, market regulation, operating the student admissions system, quality assurance, approving programmes of study, and taking up student complaints. Some of these functions may alternatively be carried out by bodies owned and controlled by universities, acting collectively, instead of being carried out by a state agency. Forms of ‘sector infrastructure’ differ across countries, and sometimes within countries through devolution or federalism. The configuration of these agencies is significant because it can have a major role in determining where governments have strong powers of intervention, or where sector-level systems of governance hold a strong steering role. There is also a significant role in the policy environment for forms of professional regulation, which generally applies to a range of vocational subject areas. Professional communities wish to ensure programmes will maintain specific codes or standards of practice in real-world applications. A complicating factor is that while some professional bodies are also statutory bodies – in effect, arms of government – some are not, so their power over programme design is not strictly government power. However, in many cases, were the non-statutory body not to exist, the state would need to create a body to carry out its functions, and these bodies thereby often occupy a quasi-public role and have public interest accountabilities. Because the structures underpinning policy pressure are complex, further consideration of the role that it can play in shaping programme design activity requires us to give more consideration to models of policy implementation, as applied to higher education systems.

## 2.5 – Modelling policy implementation

There has been considerable debate over the question of how policy implementation in higher education works. Cerych and Sabatier (1986) examined cases of higher education policy reform in six European countries. They viewed policy implementation as a top-down process in which concrete directional decisions from central governments were carried out in and through their countries higher education sectors, albeit with mixed results. This top-down model provoked considerable debate, with other scholars suggesting that actors at the front line of sectors have more discretion over policy enactment than is recognised, considering the strongly instituted principles of academic autonomy and distributed governance operating both between and within universities (Gornitska et. al. 2007; Kogan et. al. 2006; Kohoutek 2013).

Others have sought to reconcile these issues by looking at interactions across multiple levels in the system. Barber takes essentially a top-down delivery approach but gives greater recognition to the importance of actors at the ‘front line’. He sketches a ‘delivery chain’ for the education service in Pakistan, with the Chief Minister at the top and teachers at the bottom, writing that “the delivery chain maps out all the crucial stakeholders, dependencies and relationships, from the leader of the system to the front line” (Barber 2015: 120). However, Barber’s model is quite insensitive to the agency of those at the front lines, or at levels in between the front lines and the top. In addition, there may be national system differences involved that limit how far the model can be generalised. The “implementation staircase”, first described by Reynolds and Saunders (1987) and later adapted for higher education by Trowler (2002), resembles Barber’s model but begins to deal with the problem of insensitivity to complex dynamics at the front line. Reynolds and Saunders attempt to unpack how front line professionals can have a significant bearing on how curriculum reform may be delivered: “in recognising the kinds of interpretive judgements and adaptations that teachers have to make in using curriculum policy, we can see why the metaphor of curriculum ‘delivery’ inhibits sensitivity to what is really involved” (Reynolds & Saunders 1987: 213).

These accounts deal in different ways with visualisations of the policy process that can be described as primarily *vertical*, in that they are concerned chiefly with the interactions between different levels of action. A separate vein of literature approaches the *horizontal* dimension of policy implementation. Contributions by Hood (1986), Schneider & Ingram (1990), Howlett (1991) and subsequently Howlett et. al. (2009), develop various models based on analysis of ‘policy tools’ and/or ‘policy instruments’, which may operate together within ‘policy mixes’. Policy instruments and tools are mechanisms used by governments to enact policy, which

may include training and reporting, regulation and licensing, grants and loans, deployment of management consultants and other direct interventions, amongst others. These tools may then be organised for analysis into spectra concerning the extent to which they are voluntary and compulsory on the part of other actors in the system, and as to whether they involve significant restructuring of systems versus changed management approaches within them (Howlett et. al. 2009: 168-170). Sandfort and Moulton also consider the blend of policy tools to be very important to shaping what happens at different levels in the system, but consider the approach to have too many limitations when deployed in isolation from discrete analysis in multiple levels of strategic action (2015: 50-52).

Kogan et. al. (2006), in an extension of Bleiklie (2002), offer a synthesising account that takes into account both the vertical and horizontal dimensions of analysis. Their study uses the concept of fields to analyse the changing interactions between the macro (government / quasi-governmental layer), meso (universities' governance and management layer) and micro (academic professional) levels of the higher education system. This is then blended with the application of a policy instruments lens. Their conclusions include the following remarks:

“We cannot presume that changes in social relationships and behaviour within higher education follow from structural reforms. [...] Changes within fields of social action are driven by different social forces. It is thus an open question how and to what extent academic institutions and practices are affected by major policy changes. This depends on the extent to which the changes are welcomed by, relevant to, moulded and absorbed by academic institutions and practices.”

(Kogan et. al. 2006, p.174-175)

We can focus the analysis more tightly by considering the specific role of management in the strategic action field at the meso level. For Sandfort and Moulton, “one of the criticisms of political science approaches to implementation is that the administrative processes critical to shaping programs at the operational level are often overlooked... the priorities and resources of the organization within which a program operates shape the contours of the program, for better or worse” (Sandfort & Moulton 2015: 140). The determination of priorities and allocation of resources are heavily conditioned by strategic managers in an ongoing interface with formal structures of governance. This is not to say that management and governance are the only things that condition these matters - only that they are crucial to it. Sandfort and Moulton's model centralises organisational functions that have a strong role in converting policy into action: “authorising” and “service delivery”. In the former, organisations create established

routines and systems for deciding what to do and how to do it. In the latter, these decisions are given substance as services encountered by users.

Higher education scholars are not alone in seeking a closer integration between policy implementation and public service management. Lynn and Robichau conduct a systematic review of 300 studies in this vein, arguing that “policy structures enable as well as constrain managerial discretion... managers employ both structures and processes to influence service delivery and its outputs/outcomes, implying that management contributes in significant ways to the ultimate performance of public policies and programmes” (Lynn & Robichau 2013: 220). Lynn and Robichau draw an important distinction between tightly regimented authority-based policy tools where there is little management discretion, and wider policy mixes in which managerial discretion may become very important to shaping outcomes. They also see the extent to which managers can control the front-line of delivery as an important factor, though not necessarily decisive. Likewise, through an extensive study of welfare reform implementation in the United States, Riccucci (2005) shows how management at the organisational level can have a major bearing on the design of services, even if managers may struggle to directly control the day-to-day actions and behaviours of front line staff who have their own scope to use discretion. Riccucci ultimately appears to favour a more top-down model of implementation, but her analysis focuses not on whether implementation is top-down or bottom-up, but instead on how management action operates at the key meso-level interface between the top and the bottom.

There has been gradual shift in thinking about higher education policy implementation from an overly hierarchical approach in which the main controversy is the primary direction of influence in the hierarchy, towards a range of approaches in which actors at different levels within only partly hierarchical systems all have an influential role, but their respective roles are dynamic and change in evolving circumstances. Organisational conditions within universities may be crucial to how practice relates to the policy environment, especially in relation to the mediating position of managers. The most recent developments concentrate interest on strategic action fields, through which it may be possible to observe and understand the interaction between policy change and organisational practice, and how this may shape outcomes. A critical issue for inquiry into practices of programme design is the extent to which, following Kogan, they welcome, relate to, and absorb policy change. This does not always work smoothly, to say the least. In one entertaining example from the literature, a Pro-Vice Chancellor seeks to respond to a government initiative for stronger employer engagement in postgraduate programmes by initiating a wide-scope redesign of postgraduate programmes in the university. The results were problematic:

“Their responses ranged from the cautious to the negative to the hostile. They raised what are, from a practitioner's perspective, perfectly obvious questions. These concerned the impossibly tight timescale for planning and validation, the resource implications for the department and workgroup, the fact that the university's accommodation and catering standards were not high enough for even current provision or sufficiently oriented to the needs and expectations of mature postgraduates. Staffing issues, particularly the multiple demands on staff and the intensification of academic work generally were important elements of the response. Underlying questions concerned the flow of resources in the scheme and the profitability question: what was the payoff for the resources immediately needed to mount this scheme?”

(Trowler & Knight 2002: 153)

The example is interesting and important, because it will be seen that although Trowler and Knight characterise these problems from a front-line professional perspective, they can also clearly be visualised as problems from a managerial perspective. The way in which they cut across services in multiple divisions of the university, the way in which quite significant income and expenditure judgements must be made, the impact on human resource availability – all suggest both a crucial management dimension and an expectation that a programme design issue may well reach across into other kinds of management issues.

## *2.6 – Towards an integration of management and design?*

At this stage we can bring together the various strands of discussion in a convergence centred on the university as an organisation, and how programme design practices are governed within it. In doing this, the complex interplay between policy pressures, management, and the realities of the front line swiftly become evident. Clark (2004) theorised that as universities faced greater challenges, they would need to develop a “strengthened steering core” (comprising a combination of both management and external governance actors), which shapes university market positioning and planning. Sometimes managers have little choice or room for manoeuvre in responding to the demands of policy, because there are explicit and non-negotiable requirements to be met. Sandfort and Moulton give the example of how departmental red tape in universities may often stem from the funding rules and requirements of government agencies, where reliance on those funding sources requires full compliance (Sandfort & Moulton 2015: 146). But managerial strategic action in more traditionally professional matters, such as programme design, may also be provoked or stimulated by

policy pressures if they are acutely targeted at those areas of activity, or by an overriding demand for programme innovation to respond to market pressures, more so as these develop in intensity. In 1994, Roger King observed that “it is an interesting, and perhaps remarkable, fact that in higher education the core of the academic enterprise (the course or programme as ‘product’) lies largely outside corporate control... the search for growth, efficiency and quality are essential organisational requirements that will take senior managers more directly into the heart of the academic domain” (King 1994: 70-71).

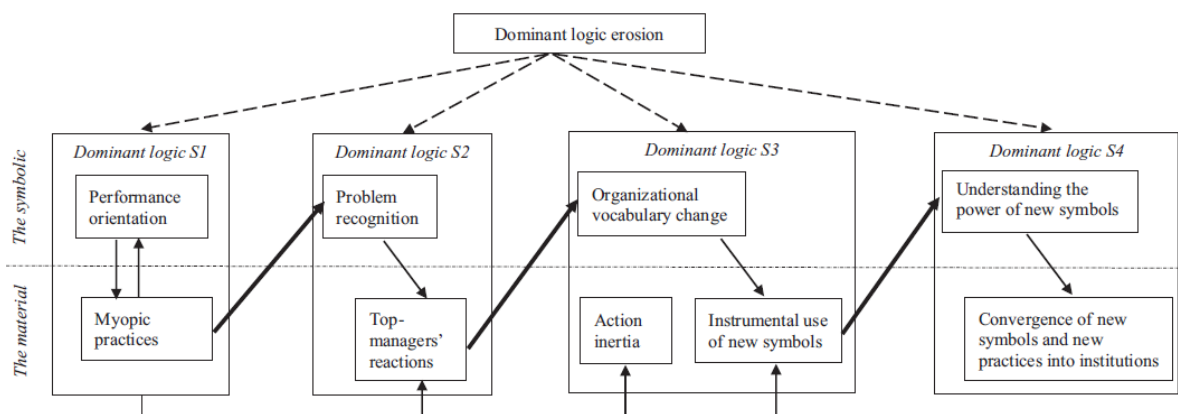
This forecast has resonance with accounts of New Public Management (NPM) as a dimension of contemporary higher education systems (Bleiklie 1998; Musselin & Teixeira 2013; Broucker & De Wit 2015). But in a challenge to the dominance of New Public Management theory, Osborne (2010) suggests that its theoretical foundations are insufficiently sensitive to the realities of service-centred management processes, and the way those processes are connected to public policy drivers, arguing that we need to move towards broader conceptions of governance. Musselin and Teixeira (2013) take up this line of argument for higher education, showing how in that context management must necessarily relate heavily to thick and well established organisational layers of governance as well as to other social factors, bringing wider concerns to university managers beyond efficiency and effectiveness. Broucker and De Wit (2015) likewise foresee a possible future for higher education moving beyond New Public Management and grasping alternatives for reforming organisational practice that bring in a wider range of interests, values, and stakeholders.

Some design scholars have positioned design thinking as a possible means to move beyond New Public Management. In an argument directly related to Osborne’s, Bason (2017) outlines how policy implementation, management, and design are becoming more integrated as strategic managers look for new techniques to connect market and policy imperatives with user-centred outcomes (Bason 2017: 66-68). Junginger and Sangiorgi (2017) examine empirical cases drawn from welfare support agencies, job seeking support agencies and primary healthcare. They position service design as a way to move beyond NPM approaches and improve the responsiveness of public services to policy change while maintaining and developing a stronger understanding and connection to the needs, values, and feelings of end-users. Cooper, Junginger, and Lockwood (2009) offer a practical account of the integration of design into organisations and they outline different potential management approaches for taking such integration forward. Dunne (2018) considers design situationally in relation to balances of centralisation versus distribution, and consultation versus collaboration. Junginger (2009) develops a model of design positioning within organisations – that archetypally it may be seen as external and bought in on a consultancy basis, localised

within a particular function or department, centralised with high senior management involvement and a role in strategy, or intrinsic and shared as a value and practice across the whole organisation. Using survey research, Schmiedgen et. al. (2015) found that, of these, the localised mode was by far the most common.

Another model, underpinned by a particularly strong foundation in institutional theory, is provided by Kurtmollaiev et. al. 2018. These authors develop a theoretical model of organisational logic change, with implications for what factors may modulate the integration of design approaches in organisations where it is novel and unestablished (Figure 1). In their account (p.69-70), organisations begin in a “feedback loop” of established practices, which may then be disrupted by the introduction of exploratory design methods which cause “insights, surprises, and shocks”. This recognition of problems presages a break in the loop, some erosion of established organisational vocabulary and an opportunity to trigger changes in that vocabulary, the instrumental use of new symbols, and challenge to sources of action inertia. The authors draw a distinction between symbolic and material dimensions, where the former is concerned with issues of leadership, language, and the extent to which actors felt licensed to engage in new approaches, and the latter is concerned with deployment of resources, local problem solving, and experimentation. The role of senior managers in sanctioning symbolic change is considered to make this faster, and thereby the forerunning dimension in the process. They theorise that this process results in the erosion, over time, of dominant organisational logics, and ultimately the potential adoption of new logics. Throughout the process, unless an alternative organisational logic finally becomes dominant, the characteristics of the original established practice will continue to influence transitional states, such that multiple logics operate in the same field, in competition or in parallel.

Figure 1: *Theoretical model of organisational logic change*, reproduced from Kurtmollaiev et. al. (2018), p.69



In the Kurtmollaiev et. al. case study, the company investigated had developed within an environment of strongly market-centric institutional logics “emphasizing large-scale market research, distinct predefined stages with clear deliverables, and standardized outputs to ensure efficient transactions, market expansion, and profit growth” (p.60-61). This had produced a dominant organisational logic of internal performance measurement and siloed project focus. These logics were displaced over time by a new logic of user-centredness. However, they also say that this was “an unintended consequence – none of the early service design initiatives aimed at the organization-wide transformation of symbols and practices” (p.70). It is therefore possible, even likely, that many organisations will remain indefinitely in what the model treats as a transitional state.

If models of the kind summarised here were applied to higher education the implications could be very substantial. Anne Boddington, for example, argues that “a future role for design within universities might be its ability to develop and reshape both the art and craft of learning. In analysing user experiences, systems design and underlying educational infrastructures, design knowledge offers the skills to create progressive and evolutionary frameworks for the creative and intelligent development of learning” (Boddington 2012: 188). Some voices, however, are suspicious of novel management approaches, especially when they are imported from outside the academy, a line of argument that can be traced back as least as far as Veblen’s *The Higher Learning in America* (2015[1918]). In more recent times, authors have been concerned about the prospect of rampant “academic management fads” (Birnbaum 2001), the rise of “academic Caesars” (Fuller 2016), or the surrender of universities to the values and practices of auditors and management consultants (Collini 2017). Lee Vinsel takes aim directly at the use of design thinking in universities, saying that it is “a boondoggle” and that its proponents are “delusional” (Vinsel 2018). Vinsel, a ferocious critic of design thinking in general (“like syphilis it’s contagious and rots your brain”; Vinsel 2017), argues that its application to traditional domains of academic professionalism is a classic management fad, is conceptually incoherent, has little supporting evidence to commend it, and has no track record. In these critical accounts, broad claims for the power of managerial nostrums are held to be suspect. Other critics claim that design thinking has lost its way and only by expanding its place in the study of innovation systems might it find its salvation. Badke-Schaub et. al. ask whether design thinking is “a paradigm on its way from dilution to meaninglessness”, concluding that “a better defined approach should provide a kind of a process model of designing as innovation and transformation process” (2010: 48). Even some design thinking advocates acknowledge it can easily be seen as a management fad (Dunne 2018: 37-40).



An additional problem is that in higher education specifically the intersection of managerial and political rationalities with academic matters such as programme design remains an unsettled matter. Clark did not consider the “central steering core” to have a strong role in the practice of programme design, instead visualising this as a function of departments and units at arms’ length, which should themselves be entrepreneurial. Clark suggests that too much government intervention in higher education systems will impede their performance: “the state-led pathway is clearly not one appropriate for change in complex universities in the fast-moving environment of the 21st century. System-wide changes are notoriously slow in formation and blunt in application” (Clark 2004: 366). In addition, the “central steering core” may not be itself a tightly compacted nucleus, it may be porous with a greater role for traditional academic values; it may also be unstable, or it may be destabilised by the adoption of new approaches. Kogan et. al. (2006) say that there are only weak policy effects in higher education, saying that “we have shown how aspects of academic identity, values and the more important ways of working remain stable under policy pressures” (Kogan et. al. 2006: 174). In their conclusions to the TRUE programme, Bleiklie, Enders and Lepori argue that:

“In regard to intra-organizational decision-making, European Universities keep substantial components of their traditional professional governance, particularly when it comes to matters in the academic core, such as the management of teaching... this characteristic seems to be resistant to policy pressures and is largely maintained by the universities in our sample, also in countries where NPM pressures are strong. [...] While hierarchical leadership and organizational management exercise stronger control over managerial issues, such as the organizational infrastructure or resource management, academic matters tend to be due to more decentralized departmental decision-making with the stronger influence of individual academics.”

(Bleiklie, Enders & Lepori 2017: 310)

The implication is that, if policy implementation depends on action in a strategic field of management, and core academic matters remain largely impervious to that action, then public policy interventions should have little impact on higher education programme design. This analysis suggests a picture of growing managerial and political influence on certain corporate matters, tempered with continued autonomy in relation to the most fundamental academic practices. While this position is shared by a number of scholars, there are others who argue that core academic matters have surrendered more ground to managerial and policy pressures (e.g. Molesworth et. al. 2011, Collini 2017). The TRUE programme researchers, however, also acknowledge the arguments of Osborne (2010), saying that “the study of intra-

organizational management should not be the sole focus of public policy analysis, and that it would be better subsumed to the study of public services delivery as a whole and the governance of inter-organisational relationships” (Seeber et. al. 2015: 1468). This points again towards a complex multi-level analysis of policy, management, and professional fields, of the kind we have explored in the present discussion. They maintain, however, that their conclusions “seem to support previous studies suggesting that professional values and practices are not replaced by managerial ones, but rather they are blended” and “managerialism is not necessarily at odds with collegial influence on decision-making and substantial professional autonomy” (Seeber et. al. 2015: 1469). One purpose of the present study is to investigate where design thinking stands in relation to these institutional processes.

### *2.7 – Summary and research direction*

This review has mapped several interconnected areas of inquiry – how to understand design thinking as it might relate to higher education settings, the potential role for design in supporting programme innovation and university strategy under market conditions, models of public policy implementation, and the complex ways in which all these are brought together through managerial and professional practices. These matters are theoretically dense and can be understood as a complex of factors which are intimately related. This does not mean that all the theoretical perspectives we have considered should automatically be regarded as holding equal validity in explaining which factors matter most in how higher education programme design occurs, or how this might change over time. Nor does it exclude the possibility of other theoretical perspectives that have not been discussed. However, it seems clear that we can regard higher education programme design as an object of strategic action in which higher education professionals, university managers, and policy makers can all act strategically, creating a blended hierarchy in which practices develop – in this instance, programme design practices.

Seeber et. al. (2015: 1469) suggest that “future research should then try to understand how the blending process works or may work properly... whether vertical decision-making possibly retains a consensus seeking approach”. This proposal may be seen as connected to the challenge of integrating a potentially growing role for design thinking in higher education with long standing issues of policy implementation and management, as discussed above. If the practice of higher education programme design is seen to be changing, this may be explained either by a newly emergent form of professionalism, or by impetus of management within universities, or pressures of wider public policy; it may also be shaped by a blend of these drivers. This study aims to contribute to debates around organisations, management, and the

integration of design thinking, by examining higher education programme design activity in a specific contemporary context – a case study of developments in one national higher education system. This is developed through fieldwork to collect new empirical data and addresses two inter-connected research questions, which were stated in the introductory chapter. Here they can be re-stated in the context of this theoretical discussion, giving a clear view on the theories being tested in this investigation.

The first research question is: *In what ways, and to what extent, have design thinking approaches developed within professional and managerial practices of higher education programme design?* This question seeks to test theory postulating the integration of design thinking in relation to organisations where it is novel and unestablished (principally Kurtmollaiev et. al. 2018; informed also by Junginger 2009; Cooper, Junginger & Lockwood 2009; Bason 2017; Dunne 2018).

The second research question is: *To what extent do pressures from the policy environment influence or condition programme design practices?* This question seeks to test theory postulating that in higher education organisational contexts hierarchical authority is limited, and core professional practices retain autonomy and are only weakly influenced by policy effects (principally Bleiklie, Enders & Lepori 2017; informed also by Clark 2004; Kogan et. al. 2006; Seeber et. al. 2015).

The principal theories being tested are not without their critics, though both stand on strong empirical foundations – in the case of Bleiklie, Enders & Lepori (2017) this took the form of a multi-method programme of research investigating multiple universities across Europe, and in the case of Kurtmollaiev et. al. (2018) it took the form of a multi-method five-year longitudinal study of a major corporation in the telecommunications sector. Here, they will be tested in so far as they relate to programme design activity in higher education, as that defines the scope of the investigation. Because the principal theories to be tested are rooted in theory of institutional logics, and the research questions are interlinked, it is hoped the data may suggest useful connections and insights into institutional factors affecting programme design in higher education. This might include, for instance, new perspectives on the dynamics of institutional logics or on relations between different fields at the ‘professional’, ‘political’, and ‘managerial’ levels, as far as programme design is concerned. Therefore, it is hoped the findings also have the potential to offer additional utility for theory building purposes.

## **Chapter Three: Research methodology**

### *3.1 – Chapter introduction*

Investigation of the research questions was carried out through a case study of a single national system, with a set of sub-cases at the university level. The primary method of data collection was semi-structured interviews. This chapter describes in detail the methodological approach adopted. It first considers the chosen methods in terms of their foundational basis in methodological theory, and how that relates to the objectives of this study. It then describes a 'research protocol' (Yin 2003: 67). This protocol will detail the rationale for sub-case selection, the process for identifying individuals within those sub-case universities, and the process for data handling and analysis. Finally, the chapter will address issues relating to research ethics and researcher positionality.

### *3.2 – Case study methods in relation to theory testing*

Yin (2003: 1) says that "case studies are the preferred strategy when 'how' or 'why' questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real-life context". George and Bennett (2005: 19-22) propose "four strong advantages for case study methods that make them valuable in testing hypotheses and particularly useful for theory development". Firstly, these authors claim, case studies offer the possibility of achieving a high level of conceptual validity - a capacity for refinement of concepts in application to specific contexts, where the phenomena involved are hard to measure and/or where deep analysis of complex contextual factors may be needed. Secondly, they provide the opportunity to open new lines of enquiry provoked through data collection, leading to the inception of new hypotheses, where other methods are often confined to testing existing hypotheses. Thirdly, they offer a means to explore causality, not by a process of eliminating alternative variables until causation to only one variable can be attributed, but by revealing the underlying structures of causative pathways. Fourthly, case studies can enable us to examine how multiple factors may affect phenomena in a complex pattern of causation - in other words, to assess competing influences on the subject of interest. These attributes of the case study approach make it a good match for tackling the research questions posed in this study. They are questions of a type well suited to this mode of research, which seek to explain the effects of multiple influences on programme design.

Eisenhart acknowledges that case studies can be used "to provide description, test theory, or generate theory" (Eisenhardt 1989: 535), and her focus on the latter has produced a

comprehensive blueprint for a theory building case study procedure. Yin critiques a widespread “hierarchical view” of research methods (in which quantitative and experimental methods are seen as privileged, stronger forms) “reinforces the idea that case studies are only a preliminary research strategy and cannot be used to describe or test propositions” (Yin 2003: 3). Theory testing poses additional challenges: 6 and Bellamy, for example, suggest that the small number of cases in a study that typifies case-based methods is the key limitation on their capacity to test theories; they allow for one exception where a theory claims a particular factor is a necessary condition for an outcome, where a single case of the outcome arising in the absence of that factor provides falsification of the theory (6 & Bellamy 2012: 103). Numerous papers, however, claim a wider role for case study methods in theory testing (Johnston et. al. 1999; Iacono et. al. 2011; Løkke & Sørensen 2014).

Eckstein (1975) argues that case study methods are highly applicable to theory testing, and he offers a framework to do it which is more flexible (and less definitive) than the ‘crucial case’ (or ‘strict falsification’) test cited by 6 and Bellamy, but still retains procedural rigour. This involves case selection focused on apparently ‘most likely’ and/or ‘least likely’ cases. This holds that if data from cases which *prima facie* seem ‘least likely’ to fit a theory still do fit, then we can increase our level of confidence in that theory. Conversely if data from cases that *prima facie* seem ‘most likely’ to fit a theory, upon investigation seem not to, then this should weaken our confidence in the theory. This approach to testing theory is inherently reliant both on purposive sampling, and on acknowledgement of the existence of prior expectations on the part of the researcher, at least in terms of the theoretical significance of empirical findings. Inference based on this reasoning also has implications for what kinds of claims can be warranted by it. For George and Bennett, we are not looking here for the standard of verification or refutation; we are instead trying “to identify whether and how the scope conditions of competing theories should be expanded or narrowed” (2005: 115). There remains a substantial well of doubt over the validity and generalisability of case-based methods. Even within the qualitative methods tradition, some scholars are insistent on stronger forms of inference (e.g. King et. al. 1994) than those under consideration here. The sample of sub-cases will be small and the range of perspectives it is possible to capture within that sample will be restricted, and there are acknowledged limitations to validity and generalisability. However, following George and Bennett, any finding that helps to update the scope of theory can be useful and significant.

Furthermore, while a key aim of the study is to test theories, the underlying purpose of doing this is to explore theoretical issues and to build new theory. This may bring the project towards what Colquitt and Zapata-Phelan have termed a “theory expansion” (2007: 1283) approach,

arguing that “theory testing and theory building are not zero-sum ideals... both represent key components of theoretical contribution that can coexist within a given empirical article and within a given stream of research (2007: 1298). In relation to this, George and Bennett say that “a single research design may be able to accomplish more than one purpose - such as heuristic and theory testing goals - as long as it is careful in using evidence and making inferences appropriate to each research objective” (2005: 76). They visualise improved theory building reinforced with focused testing (2005: 74-75). The theory testing objective represents a demanding challenge in terms of achieving rigorous scholarly conclusions. It is important to clarify that this work is not situated in a positivist tradition of theory testing, which would impose greater expectations for testing precision and validity than can be sustained by the chosen methodology. Instead, the study adopts a realist philosophical position, adhering to a view that a form of theory testing can be used as part of the process of understanding and explaining aspects of reality that cannot be directly accessed, provided that the limits of doing this are clearly defined (as set out above), and that claims made from them are acknowledged to be both contextual and contingent on this framing. Because the key phenomena at stake in the theories under examination (such as institutions and practices) are not directly observable, they can only be understood provisionally. Theory testing in this ontological context can be carried out, but these tests cannot be regarded as concrete or complete, in contrast with a positivist ontology. As 6 and Bellamy have put it, the aim of a realist approach is to “develop our understanding of such unobservable things by careful, progressive construction and empirical examination of testable theories and models” (6 & Bellamy 2012: 60).

### *3.3 – Research protocol*

Following Yin (2003), this section sets out the practical research protocol adopted for implementing the study. This includes the process and rationale for case and sub-case selection, and the procedure for data collection and analysis.

*Principal case selection.* The principal case investigated in this study is the English higher education system between 2017 and early 2020; within this, more granular sub-cases at the level of individual universities will be identified. The English higher education system in this time frame represents a good case for investigating the research questions posed. Firstly, it has been a landscape of turbulence with increasing market competition. Secondly, there have been significant changes in the policy environment, concerning the funding and regulation of learning and teaching activity within universities. Questions of quality and the value of higher education programmes have come to the foreground. A full narrative account of this can be found in the following chapter. The overall picture is one of substantial market and policy

pressure on universities, to revise their approaches to learning and teaching, and the methods they use to organise this activity. Programme design activity occurring in a system operating under these conditions can therefore be rationally treated as ‘most likely’ to fit theories of organisational design integration (Kurtmollaiev et. al. 2018; Cooper, Junginger & Lockwood 2009; Bason 2017; Dunne 2018), and ‘least likely’ to fit theories of weak policy effects (Bleiklie, Enders & Lepori 2017; Clark 2004; Kogan et. al. 2006; Seeber et. al. 2015). In other words, this environment represents the kind of circumstances in which we would expect universities to change practices around how programmes are designed, and furthermore we would expect to see public policies making a difference in how that happens.

*Sub-case selection.* Initial desk research was done to identify sub-cases representing universities in different circumstances within the wider case environment. Four universities were identified, each operating across a wide range of different subject areas. They conduct both teaching and research activity but are not ‘research intensive’ universities. This supports a response to the research questions by looking at universities relatively focused on learning and teaching matters, and ensures they are reasonably comparable, although these benefits may come at the cost of reducing the generalisability of conclusions to some extent. By selecting contrasting pairs of universities, this was also intended to offer scope for comparative analysis. Official higher education statistics and known facts about a range of universities were assessed, with the pool narrowing around two groupings.

Table 1: *University categorisation*

<b>‘Advancing’ universities</b>	<b>‘Challenged’ universities</b>
Typified by rapidly growing undergraduate student numbers in the last five years, rising relative positions in a range of public league tables, achieving ‘Gold’ outcomes in the Teaching Excellence Framework, and winning major prizes in HE-sector award schemes; these universities also exhibit growth in income and therefore wider scope to embark on new ventures and activities	Typified by static undergraduate student numbers in the last five years, falling relative positions in a range of public league tables, and achieving ‘Bronze’ outcomes in the Teaching Excellence Framework; these universities may also face significant resource constraints, because as costs rise, with static fee levels and student numbers, they are increasingly financially pressurised

It is important to state that neither term of classification is intended as a pejorative or a judgement on quality, leadership, or governance – it is a mechanism deployed here for focusing a sub-case selection with polarised characteristics vis-à-vis market and policy factors. It is very possible for a rapidly ‘advancing’ university to face great operational challenges and get things wrong, even possibly to ‘advance too far’ and not be able to manage its risks; it is equally possible for a ‘challenged’ university to be a centre of very high-quality education and research.

From within the two groupings, four individual universities were identified for contact. In some instances, this choice was determined by there being a clear contact point already known to the researcher. This was an important factor in gaining first access and then onward referral to interviewees. However, care was taken to ensure that there was not a concentration of the sample in any particular subject focus or particular region. All four universities were ‘multi-faculty’ or ‘multi-school’, with a wide subject range, although one of them leans towards arts, humanities and social science subjects. While all of them conduct some research that has been highly rated in the Research Excellence Framework, none could be described as ‘research intensive’ in terms of the total volume of research or reliance on research-related income, vis-à-vis teaching-related income. One university was in the north, one in the south east, and two in the midlands. Additional description of the four universities is provided in the next chapter, with some limitations on the level of detail to mitigate the chances of disclosing participant identities.

*Interview subject identification.* Snowball sampling was used to extend the data collection reach within each university. This sampling was purposive – serial requests were made for contact points with a range of people who could offer different perspectives on the issues at hand. This meant seeking out individuals likely to provide data concerning the inception, approval, and development of new programmes (or the substantial modification of existing programmes); the methods and techniques used in programme development; the factors and influences bearing on programme development work. People were sought for interview who would fit into three broadly conceived role types, set out in the table below. It is acknowledged that these categories can have different meanings in different universities to some extent, and levels of individual seniority vary within the three categories; the allocation was primarily driven by the main purpose of people’s roles.

Table 2: *Role types of interview participants*

<b>Senior managers</b>	<b>Lead support staff</b>	<b>Programme developers</b>
People at high levels of university management, with responsibility for learning and teaching, strategic planning, academic registry, or a combination thereof	People with managerial or operational responsibility for functions auxiliary to learning and teaching – e.g. quality assurance, learning enhancement, curriculum development	People with ‘front line’ responsibility for developing new undergraduate programmes of study within academic departments or similar organisational units

*Data collection.* Data collection took place between late November 2019 and late January 2020. Data was collected by means of in-person interviews except in one instance where the interviewee’s schedule necessitated a telephone interview. For three universities, all data was



collected on a single visit, and in the fourth the researcher made multiple visits over the period. Interview topic guides (Appendix A) were used to guide the discussions. These topic guides were developed for the roles of ‘senior manager’ and ‘programme leader’, and a mix of the questions from both topic guides used to support interviews with ‘lead support staff’, depending on their level of seniority and the precise focus of their role. Questions posed to interview subjects had to be carefully framed to elucidate data pertaining to the research questions without either ‘leading’ participants or confusing/alienating them. An initial target of four interviewees for each university was adopted, which would bring the total intended sample, in terms of interview subjects, to sixteen. In the eventuality, the numbers of interview subjects in each university were seven, six, five and four – for a total set of twenty-two interviews. The profile of these interview subjects is set out in the following table:

Table 3: *Summary of interviews conducted*

<b>Subject Codename</b>	<b>Subject Role Type</b>	<b>University Codename</b>	<b>University Classification</b>
Alexis	Senior manager	Devlin University	Advancing
Bernie	Senior manager	Devlin University	Advancing
Calvin	Lead support staff	Devlin University	Advancing
Diego	Lead support staff	Devlin University	Advancing
Elena	Lead support staff	Devlin University	Advancing
Frieda	Programme developer	Devlin University	Advancing
Grace	Course developer	Devlin University	Advancing
Hassan	Senior manager	Crawford University	Advancing
Isaac	Senior manager	Crawford University	Advancing
Janice	Lead support staff	Crawford University	Advancing
Kareem	Lead support staff	Crawford University	Advancing
Lamar	Programme developer	Crawford University	Advancing
Myles	Senior manager	Bailey University	Challenged
Nancy	Senior manager	Bailey University	Challenged
Oscar	Lead support staff	Bailey University	Challenged
Pierre	Programme developer	Bailey University	Challenged
Quentin	Programme developer	Bailey University	Challenged
Rashad	Programme developer	Bailey University	Challenged
Shane	Senior manager	Scher University	Challenged
Tameka	Senior manager	Scher University	Challenged
Ursula	Lead support staff	Scher University	Challenged
Vernon	Programme developer	Scher University	Challenged

*Data analysis.* Analysis was carried out in a systematic approach based on the ‘Framework’ model for thematic analysis (Ritchie, Spencer & O’Connor 2003). Interviews were transcribed and the resulting text transferred into NVivo software. All transcripts were read as a whole, and apparent common themes noted. Initial coding began to organise data extracts in line with

those codes, and others that arose during the process. Codes were then organised into major thematic groups informed by the research questions in the study, and then into subgroups where appropriate. Re-coding and cross-coding were done by way of another sweep of the raw data, and by running through each already-coded theme. The resulting final coding scheme is shown in Appendix B. Codes were taken by major theme and exported as 'frameworks' for more detailed analysis, cross-referencing themes and participants. NVivo tools were also used to visualise links and connections between different codes. In reporting findings, a combination of summary and direct quotation is used. In all cases of direct quotation, square brackets are used to indicate where the researcher has made redactions or lexical changes; this is sometimes done to help preserve participants' anonymity, and sometimes to remove extraneous speech or excessive levels of detail, but it is never done in such a way as would change the meaning of what was originally said.

### *3.4 – Research ethics and researcher positionality*

The study was approved through the ethical review process of the University of Bristol School for Policy Studies, prior to fieldwork being conducted. It was important to assess and respond to some key ethical considerations in this process, which are summarised here. More detail is provided below in a copy of the research ethics approval application form (Appendix C).

Informed consent was gained from interviewees prior to their interview. Participant information sheets were given which explained the background to the study and explained to participants their right to withdraw at any time without giving any reasons and their right to full erasure of their personal information and any data they contributed, in accordance with the Data Protection Act 2018 and relevant policies of the University of Bristol. Specific written consent was sought and received from interviewees for:

- Being interviewed on the topic of higher education programme design and related issues
- Audio recording and transcription of the interview
- Use of the resulting textual data in the preparation of published documents, including this dissertation, and future storage in relevant data repositories

As the interviewees were all experienced professionals working in higher education, they could be reasonably expected to have a clear understanding of informed consent, which was an advantage. There remained a concern that participants must protect their own professional and their university's reputation and relationships, and the anonymisation techniques provided should be sufficient to achieve this. Interviewees gave their consent on the understanding that

both they and their university would be given anonymity in the final dissertation, to achieve a 'double screening' and help to mitigate the chances of disclosing their identity. Two participants brought particular attention to the importance of this, in interview, while making certain remarks, or highlighted points where they thought disclosure of their identity was a risk. In the analysis that follows, great care has been taken to disguise potentially disclosive information, and this necessarily results in some cases in elision and/or redaction of certain words, phrases, or expressions.

Issues relating to researcher positionality were also of concern. The researcher has worked in the higher education sector for some time and has some profile within the sector as a writer and speaker. There were risks that participants may feel the researcher was not an unbiased actor or may have felt that in relation to some interview questions there were 'correct' answers to give from a corporate standpoint where their own view was different or in possible tension with an established position. A complicating factor was that it was not possible, due to the snowball sampling approach, to ensure anonymity of interview subjects within their own university. One helpful mitigation was the researcher leaving his full-time position of employment prior to the fieldwork beginning; this was coincidental, but useful as it eliminated a structural issue that was previously in place. Other mitigations included ensuring each interview ended with a more open discussion, in which interview subjects often asked the researcher to explain more about his own research direction and theoretical framework, and in many cases this led to their reassurance and also the collection of additional and different data with a particularly reflective character. Audio recordings were made, stored, and transmitted using secured and encrypted devices, servers and means of transmission. Recordings were professionally transcribed by a company approved by the University of Bristol for which a Data Processing Agreement covering the whole university was in place.

### *3.5 – Reflections on the research process*

Developing and implementing the framework and procedure for doing empirical work was a very challenging process – probably the most challenging part of the whole endeavour. For a long time it seemed impossible to make sense of how to relate the task to the theoretical debates under discussion. Even defining the research questions was an extremely protracted effort. While the dissertation presented here hopefully displays coherence and a well thought-through research approach, it is acknowledged that in reality the pathway from conceptual idea – looking at 'what design means' in the context of higher education – to a fully-formed research project has been tangential and messy at times. Originally, a second phase of interviews was envisaged to collect data directly from policy actors (e.g. government officials),

but as the research questions crystallised the focus became much more concentrated on the dynamics within universities, including their responses and reactions to policy pressures rather than on the origins of those policies. Time and access problems also became limiting factors on a second phase of data collection. Perhaps the key reflection is the realisation that a great deal of social science (and probably some natural science as well) must often be carried out in suboptimal conditions and is a bumpy ride, even if it looks very well formed in the pages of a book or journal.

There were also practical missteps and challenges. For example, the first model for seeking participants envisaged an open call for participants circulated on relevant higher education networks and mail bases, to achieve a wide catchment, with direct approaches intended as a contingency plan. This was initially attempted but garnered no responses at all – an instructive lesson in how hard it is to ‘cut through’ the noise people experience in their professional (and personal) lives, if attempting open calls for research participants. Because of this, the alternative approach of using desk research to identify candidate universities, followed by snowball sampling within them, was employed as the main route to data collection. This ultimately proved to be a highly successful path for data collection and would perhaps have been the more appropriate choice from the outset. The complexities of securing access and the logistics of doing more than twenty interviews in a short period of time were also underestimated. These have been important learning points.

## **Chapter Four: The transforming English system – a turbulent environment for new programme development**

### *4.1 – Chapter introduction*

This chapter introduces the principal case for the study by way of an extended narrative account of how the landscape in that case has evolved both leading up to, and during, the period of interest. For the purposes of situating the case and sub-cases, understanding their full context, and their utility for theory testing, it is necessary to take a wider and longer view at first instance. In the English higher education system, the period since May 2010 has been characterised by very high turbulence. This turbulence has involved radical changes to the arrangements for funding higher education, the structure of the higher education marketplace for undergraduate admissions, and latterly very active policy intervention on the part of government in relation to learning and teaching, involving the inception of a range of new policies and public structures. Indeed, these factors are inter-related. A narrative description of these developments will help to explain the usefulness of examining this environment to respond to the research questions. The chapter then moves on to introduce the four sub-cases where fieldwork was conducted, and the interview participants in each of those sub-cases.

### *4.2 – Narrative introduction of the principal case*

In May 2010, the United Kingdom held a General Election which brought a coalition of Conservatives and Liberal Democrats to power. This government moved swiftly by the end of that year to pass measures increasing the level of the cap on undergraduate tuition fees from £3,250 to £9,000 per annum. In parallel with the implementation of this policy change, centrally allocated direct public funding was withdrawn, so that the vast majority of funding for learning and teaching activity would flow directly from students, albeit covered pound-for-pound by income-contingent loans issued by a public finance body, the Student Loans Company. The dynamics of the income-contingent loan system are complex and have divergent effects, but one unambiguous effect of the policy change is that most people will pay a lot more for their first degree, over time, than they had done in the past.

In December 2013, the Chancellor of the Exchequer announced the removal of all undergraduate 'student number controls' in the English higher education system. Henceforth, universities and other providers of higher education would be allowed to recruit as many undergraduate students as they wished, where previously they were confined to meeting centrally imposed quotas (with allowance for a tolerance level of +/- 5%, year-on-year). This

policy change ushered in a more dynamic market in higher education provision, where universities could expand, and in some cases expand rapidly, at the expense of rivals. Although the expansion potential was notionally unlimited, in practice it was subject to the natural 'soft limit' imposed by the size of the pool, within the UK population, who possess the prior attainment or aptitude making them suitable for higher education (expressed formally in public examination results or otherwise). The size of this pool has reduced considerably in the years since 2013 due to changing population demography, although this trend is projected to reverse strongly from 2021 onwards, with the pool expanding sharply for a period of ten years, before plateauing in the 2030s. Students from within the European Union were during this time treated as 'home' students in relation to number controls and tuition fee levels, which enabled a larger pool, albeit not an easy one to recruit from. International undergraduate admissions were not previously subject to student number controls, but parallel policies instigated by the UK Home Office making it more difficult to obtain visas for students from outside the European Union, combined with stronger competition from other higher education systems worldwide, have made expansion in this market challenging.

At the May 2015 United Kingdom General Election, the Conservative Party included a manifesto commitment to "ensure that universities deliver the best possible value for money to students: we will introduce a framework to recognise universities offering the highest teaching quality" (Conservative Party 2015: 35). Having won a Parliamentary majority in that election, ministers moved to implement these commitments. The first official move took the form of a 'green paper' (an outline statement of government intentions for consultation purposes) published in November 2015. This indicated an intention to establish a new regulator for higher education, the 'Office for Students' (OfS), and also to set up a 'Teaching Excellence Framework' (TEF). The new organisation would replace the Higher Education Funding Council for England (HEFCE) as the main body responsible for funding teaching and widening participation activity in the higher education sector (research funding was transferred elsewhere), and for quality assessment. The stated aim of the TEF from the outset was to "identify and incentivise the highest quality teaching to drive up standards in higher education, deliver better quality for students and employers and better value for taxpayers", and it was explicitly expected that "the TEF should change providers' behaviour" (BIS 2015: 18-19).

Following consultation, a white paper (BIS 2016) confirmed these plans and initiated a parallel process in which a pilot TEF exercise would be run directly by the Department for Education while legislation to create the OfS and set statutory foundations for the TEF would be steered through Parliament. At a similar time, the Wakeham review of science, technology, engineering and maths (STEM) degree provision and graduate employability recommended

that work should be done towards “embedding the development of soft skills into degree courses and improving work readiness” and “better matching degree courses to employer demand for skills” (Wakeham 2016: 6).

The OfS for its part “would be a new arms-length public body with a duty to promote the student interest, with overarching responsibility for: [...] ii) assuring baseline quality; iii) running the TEF” (BIS 2015: 58; additional stated functions omitted for reasons of concision). Thus, the OfS, its role in assuring the quality of courses, and the TEF would be intrinsically linked. Under the previous arrangements, operating under legislation dating from 1992, HEFCE (a public body) had held formal responsibility for ‘quality assessment’. It chose to exercise that duty through a contract with the sector-owned QAA, an arrangement that became an established norm. As the government began its reform process, HEFCE reviewed these arrangements and decided to reserve more authority over quality assessment. Under the 2017 legislation, the statutory relationship between the new Office for Students and the ‘designated quality body’ appointed by it changed in such a way as to put the new regulator in a stronger position than the quality body. The Higher Education and Research Bill became law in April 2017. The first TEF awards, based on the DfE pilot exercise, were announced in June 2017.

In November 2017, the government published a new Industrial Strategy (for the whole UK) which included a statement to the effect that:

“The OfS will address employer and student needs and expectations in the short, medium and long term – considering the skills gaps that exist today, and anticipating the demands of the future economy. It will make the sector more dynamic and make it easier for new, high quality providers to offer higher education. By encouraging innovation and a focus on student outcomes, the OfS will drive improvements in productivity and support the wider economic needs of the country. This will increase the number of work-ready graduates, including in STEM, and promote innovative ways of learning”

(BEIS 2017: 101)

The Office for Students came formally into being in January 2018, and has now acquired its formal powers, including powers to impose ‘conditions of registration’ on higher education providers including universities (which must be satisfied by each university in order to remain recognised for funding purposes), and its power to operate the TEF in accordance with a specification set by ministers. While it was not inevitable that the designated quality body would be the QAA, following a consultation the QAA was indeed appointed. In November

2018, the Department for Education commissioned Dame Shirley Pearce to lead an independent review of the Teaching Excellence Framework, to meet a statutory requirement to conduct a review imposed under the Higher Education and Research Act 2017. This review has been completed and delivered to ministers, but at the date of submission of this dissertation it had not been published. In January 2020, the OfS announced that no institution-level TEF exercise would run in 2020.

#### 4.3 – *Critical issues in the policy environment*

There is a great deal of finer detail associated with this narrative, but for the purposes of the present study, some of the key factors in the system that have emerged are:

- The new fees-led funding model for undergraduate education, combined with the heavily restricted amounts of direct public funding, and latterly the focus given to the new regulator, has heightened the importance of ‘value for money’ as an issue in the system as a whole. Competition has not tended to be on lines of price (the vast majority of fees are set at the level of the cap), so there is a greater need to compete for the student market on applicants’ perceptions of value; this may or may not align with programme content versus other factors such as social signalling, access to the desired peer networks, and lifestyle matters.
- The ultimate effect of student number control removal, in combination with demographic trends, has been dramatic changes in student numbers being recruited at different universities, and intense competition for market share in the provision of higher education at the undergraduate level.
- Regulatory action is much more directly linked to programme level issues and learning and teaching approaches; the ‘conditions of registration’ imposed by the OfS include a condition that “the provider must deliver *well designed courses* that provide a high quality academic experience for all students and enable a student’s achievement to be reliably assessed” (Office for Students 2018: 87 emphasis added); these ‘conditions of registration’ also make participation in the TEF obligatory.
- The Quality Assurance Agency has remained as a stakeholder in the quality system, and it remains sector-owned and controlled; it is not a public body. However, because its role as designated quality body vis-à-vis the new regulator is much more prescribed in statute,



the results of the process have been to confine the QAA to a much more circumscribed remit in England than it had held under the previous policy regime.

- The TEF gives awards of 'Gold', 'Silver', or 'Bronze' to universities, based on a combination of metrics (including data from student satisfaction surveys, student retention records, and their labour market outcomes), and also an institutional submission explaining its approach to learning and teaching; the awards are publicised and are intended to contribute to perceptions of university reputation.
- There has been rapidly growing policy attention placed on understanding and addressing differences in attainment between students from different socio-economic groups, or those with protected characteristics, especially in relation to ethnicity and disability. The OfS analyses key metrics broken down by demographic factors and takes them into account when assessing TEF outcomes and awards.
- There is also a strong general interest in the relative performance of courses in different subject areas. DfE and OfS had piloted a more granular version of the TEF which will produce awards at the subject level as well as the institutional level, which was initially intended to be in full operation from 2019 onwards. However, this has not yet been put into operation. The policy mix gives special attention to the substance of STEM provision, the preparedness and labour market outcomes of STEM graduates, and the role of these programmes in wider economic performance.

#### *4.4 – Introduction of the four university sub-cases and the interviews conducted*

This section gives some additional description of the universities in the study, and the people within them who participated in interviews. It aims to summarise the general strategic trajectory of each university over the last five years, to help 'set the scene', and to show how the universities are similar in some dimensions and different in others. It provides reasoning for the classification of Devlin and Crawford universities as 'advancing', and Bailey and Scher universities as 'challenged', within the terms of the criteria stated in the research protocol and subject to the caveats acknowledged in making those designations. All quantitative descriptions in this section are drawn from the UK Higher Education Statistics Agency (HESA), and relevant league tables where applicable. While it would certainly be possible to provide a much more detailed description of each university, this is avoided to mitigate the risks of disclosing the identities of individual participants; the level of description and background data provided is judged sufficient to understand the sample frame and draw meaning in relation to

the research questions. Specific job titles are likewise not given as this would be identity-disclosing, but an outline of the range of professional roles represented within each university is given. As indicated above, all four institutions conduct research, but none are research intensive – teaching activity is by far the larger source of revenue. In addition, to give a further sense of where the institutions stand in the sector landscape, they have an average proportion of students from state schools of 95.3% with a range of 6 percentage points, and all were above their benchmark for this indicator (derived from figures for 2018-19 entry). By way of illustration of subject coverage for ‘programme developers’ at the front line, subject areas included history, law, film studies, visual communications, management, computer science, and engineering – encompassing a wide subject variety across arts and humanities, social science and STEM. Participants in the other categories addressed a wide variety of subject examples consistent with their wider scope of view across their university’s portfolio.

**Devlin University** has increased its total student numbers by 19% between academic years 2015-16 and 2018-19, including very substantial increases (over 50%) in the key market of first-year undergraduate enrolments. Since 2015 it has risen in two influential league tables by 40 places and 14 places, respectively. It has won three major higher education sector prizes in the last five years. It holds a TEF Gold award. Devlin has expanded heavily in the provision of apprenticeships in recent years, with ‘apprenticeship start’ rates now running at about 400 per annum. At Devlin University, the interview subjects were two senior managers, one at Pro-Vice Chancellor level (‘Alexis’) and the other in a senior professional services role (‘Bernie’); two programme developers including a senior lecturer in an applied creative subject (‘Grace’), a principal lecturer in a STEM subject (‘Frieda’), and three members of lead support staff comprising one specialist in quality (‘Elena’) and two specialists in employer engagement and related matters such as apprenticeships (‘Calvin’ and ‘Diego’).

**Crawford University** has increased its total student numbers by 19% between academic years 2015-16 and 2018-19, including similar rises in first-year undergraduate enrolments. Since 2015 it has risen in one influential league tables by 10 places, although it has slightly fallen in another. It has won two major higher education sector prizes in the last five years. It holds a TEF Gold award. Crawford has also expanded its provision of apprenticeships, but not quite to the same extent as Devlin, with ‘apprenticeship start’ rates now running at about 300 per annum. It has significantly expanded its range of online provision in recent years. Crawford is the largest university in this study by student numbers (it was also the largest of the four in 2015). At Crawford University the senior managers interviewed included one person at the most senior level, reporting directly to the Vice-Chancellor (‘Hassan’), and one other member of the university leadership group (‘Isaac’). There was one programme developer,

whose main focus was on developing courses for online delivery, primarily in subjects related to business and management, but also in some health-related subjects ('Lamar'). The two support staff interviewees ('Janice' and 'Kareem') worked in the field of academic strategy and development, at a fairly senior level (but not at the same level as the two senior managers).

**Bailey University** has increased its total student numbers by 27% between academic years 2015-16 and 2018-19, but its recruitment in the key market of first-year undergraduates has only increased by 8% in the same period. The balance is largely found in its increased recruitment of postgraduate students, who tend to deliver less income per capita (postgraduate fees are often lower per annum than undergraduate fees, and the students are only enrolled for one/two years instead of three or more). It has fallen by 50 and 17 places in the two key league tables, over five years. It holds a TEF Bronze award. Nevertheless, it maintains an outstanding reputation for both teaching and research in its strongest subject areas. Bailey has expanded its provision of online courses in recent years, working with third-party partners. It does not provide apprenticeships. At Bailey University, there were two senior interviewees: one Pro-Vice Chancellor ('Myles') and one person at director-level with a focus on strategic development and external relations ('Nancy'). The three programme developers included two heads of quite small academic departments, meaning their responsibilities for direct programme development were relatively heavy ('Quentin' and 'Rashad'), and one senior lecturer in another department ('Pierre'). The subject areas of these three individuals were in a humanities subject, a social science subject and a STEM subject, respectively. There was one leading support staff interviewee, who was the head of a professional services department responsible for several planning functions ('Oscar').

**Scher University** has increased its total student numbers by only 1% between academic years 2015-16 and 2018-19, with recruitment in the key market of first-year undergraduates up by 6% in the same period. It was in the bottom third of both major league tables in 2015 and it remains in that segment in 2020. It provides apprentices in significant numbers, with 'apprenticeship starts' running at around 300 per annum. It holds a TEF Bronze award. Though it faces considerable pressures, Scher maintains a very strong profile as an important player in a city-region undergoing significant economic and political change. The interviews at Scher University included two senior managers – a Pro-Vice Chancellor ('Shane') and a person at director level with responsibility for strategic development ('Tameka'). There was one programme developer, who was a lecturer in an arts and humanities subject ('Vernon'). There was one lead support staff interviewee, who was the head of the professional services department supporting quality and curriculum development ('Ursula').

These 'pen portraits' of the four universities build upon the general narrative description of the main case under investigation. The following two chapters aim to address the research questions, by presenting an analysis of the interview data to interrogate the extent to which design thinking has developed within these universities, the dynamics of this in terms of changing professional and managerial practices, and the role that the policy environment plays in influencing and conditioning these processes.

## **Chapter Five: Programme innovation and ‘design thinking’ in practice – a mixed picture**

### *5.1 – Chapter introduction*

This chapter presents detailed findings from the fieldwork in relation to the first research question: *In what ways, and to what extent, have design thinking approaches developed within professional and managerial practices of higher education programme design?*

The chapter first gives several accounts of how each of the four universities in the study initiates new programme developments, what key factors are involved, and what the process looks like. Every interview participant in the study was first asked to give an open-ended description of that process, from their own perspective, eliciting a wide range of responses. It was apparent from the data that the four universities were taking quite different approaches to important aspects of programme inception, approval, and design, and explained in the first section by reference to the data collected. Then having reported findings from across the four universities on the extent and forms of design thinking at work, the following section provides an additional cross-cutting analysis addressing specific design-rooted attributes and techniques, and shows how using them can be a complicated problem in the higher education settings investigated here. This account does not attempt to be exhaustive: many interview participants referred to many factors and issues, but after carrying out the analysis some factors stood out as being especially important to the question of how far design thinking has developed in programme design practices.

### *5.2 – Devlin University*

At Devlin University, market considerations are central to determination of programme innovation and will often – but not always – be a dominant factor in professional and managerial deliberation about what programmes to bring forward, and when. New programme innovations have a sensitivity to both university-wide strategic aims, to possible public policy ‘agendas’, and to assessments of market factors and conditions such as the potential level of demand from applicants and the behaviour of sector competitors:

So, the schools, and the university, have a sense of where they might wish to develop their portfolio because they're picking that up from horizon scanning or strategic planning, engagement with a regional agenda or a national agenda, or whatever. This will result in an idea for a course, which then goes through business evaluation. First of all, looking to see, is it a real thing, is there a demand for it, do

people want to do it, would it be viable, who else is offering that sort of thing. Attractiveness. [...] We're going to move to a different sort of process, whereby the university will... if I get this through academic board... the university will plan its portfolios [as an] institution, rather than by lots of schools.

(Alexis, Senior Manager, Devlin University)

This can be seen in parallel with a perspective from the 'front line', where one academic had embarked on a series of new programme projects initiated by senior management. This academic was a highly experienced programme developer, having also created several new degree courses in the past. She immediately noted how much of her role was given over to new development activity (though she was not at all concerned about this):

Sometimes I think developing new programmes is all I do - all I've done for the last four years. It probably is. So, in 2015, the university decided to start [this new STEM subject] from scratch. [...] We were tasked with developing new undergraduate courses... a completely clean sheet. We weren't building on anything that existed already.

(Frieda, Programme Developer, Devlin University)

But it is also clear that high-level strategy is not the only starting point. In another account an academic pushed forward the development of this new degree programme primarily because she felt it was a gap in the portfolio in subject-coverage terms, which had been left unfilled for some time and was her personal focus and area of concentration. Her approach was to duplicate what she saw as the strongest elements of a cognate programme already running in her department, with some success. While in this instance, the first initiative was personal, there was also a strong impetus from the outset to align to a key strategy for Devlin University, around engagement with industry.

What we decided to do, what I decided to do was mirror the [other course] and structure because it's incredibly robust, it's a [related] subject so the two align. Take that structure and mirror that for [this course]. My background is as a practitioner, [...] and I've been doing that for about 18 years. I still do a bit of practice alongside my work but mostly now I'm lecturing. I suppose one thing that we were really, really keen to do is to make it align with industry in every way possible because our reputation for [the subject] is associated with the fact that we have these fantastic connections with industry.

(Grace, Programme Developer, Devlin University)

Taking these three perspectives together also shows there are some important ambiguities in how people view the dynamic. Quite often interviewees at the front line would switch between using 'I' and 'we' when talking about their practice, suggesting an area of complexity in relation to teamwork versus personal work. There is also clearly some intention on the part of senior managers to change the focal point of new programme initiatives to the centre, raising questions about centralised versus devolved decision-making. Recently, this managerial move has taken the form of a significant shift towards explicitly designerly approaches, methods, and techniques. This was apparently driven by the university senior management team and motivated by a desire to speed up programme development processes and reduce the associated administrative burden. It was conceived following the university's participation in an exploratory project run collaboratively by a small network of universities, the aim of which was to scope new ideas for learning and teaching. Interviewees were overt in their likening of the new approach to 'product design', and that this constituted an intentional move away from an established model based on quality assurance and modular segmentation and towards a collaborative model based on design thinking:

The intent is, that the process should support genuinely innovative courses, built around design thinking, rather than around quality assumptions. Quality will still be in there, but it won't be driving it. What will be driving it is, "Okay, what do we need to do? What does this course need to look like?" [...] We need to get over the idea that it's some esoteric thing that's going on. It's product design. The most important thing we do, from my perspective. [...] It's about product design. That's where I want us to move into, design thinking.

(Alexis, Senior Manager, Devlin University)

We're right in the middle of a big change process where we're moving to design sprints. So we're pulling that – those people and those resources – together into intensive days where we are properly designing courses, as opposed to an individual sitting at their desk, collating some modules.

(Elena, Lead Support Staff, Devlin University)

The new programme design approach being put in place at Devlin is intended to replace the existing programme approval process across the entire university. Following the initiation of a new course idea and some early development at the departmental level, a 'consultative meeting' would be held, chaired by a senior manager, which would determine whether the programme should proceed to the 'sprint stage'. Activity then moves into some prescribed,

design-based preparatory tasks for the course team, primarily involving the creation of 'student personas' describing the kinds of students envisaged to come onto the programme in terms of who they are on entry and what are they expected to be on graduation, expressed in relation to knowledge, skills, and personal attributes. This is in addition to background material on the market positioning of the prospective programme. After these materials have been developed, a one-day 'sprint' event is held, including a range of activities intended to shape the programme; the aim at the end of this event is to generate a 'blueprint' for the programme setting out the student journey, including structural and pedagogic mapping. This is followed by some additional work and a second sprint day at which the student journey is discussed with a wider range of university stakeholders including a range of 'artefacts' on display showing how the course would be delivered in practice. This second day is intended to resemble a kind of pitching session, culminating in a decision about whether the programme is ready. Crucially, at the end of that session if it is concluded the programme is ready, it is then deemed to be approved, without any further formal approval templates, submissions or panels.

Front-line programme developers at Devlin also characterised the design task in terms that point with more weight towards a design-like process, for example in relation to creative development, or creative problem-solving, the idea of creating a clear student journey, working to a prior brief or specification of needs, or conducting broad user research in developing programmes. These conceptions fall some way short of the intentional and strategic utilisation of design techniques that the new approach planned by managers and support departments envisages, however the willingness of front-line practitioners to engage with the concepts may indicate that some 'soft messaging' about the change of process has already been transmitted through the university, or at least will find some common ground when it is fully rolled out.

Well there is a whole approach to design that we take that can be applied to lots of different areas. I would certainly say there were some crossovers with that. It's about working to a brief, understanding the boundaries of your brief, being really clear about that and then seeing what's possible within those boundaries and feeling like you can be creative, you've obviously got to research, I'm sure that everybody does that but that's a really important part of it, talking to different people who might be able to feed into it.

(Grace, Programme Developer, Devlin University)

The new approach at Devlin calls for the intentional use of design using collaborative, iterative and problem-solving methods, and a range of specific techniques associated with design thinking. However, it was only at the point of being piloted when the fieldwork for this study



was conducted and has yet to be used at scale. It is therefore untested in practice, and interviewees acknowledged both that it is a major departure from established practice and that implementation could be a bumpy process. For example, it was observed by one interviewee that the sprints themselves could easily become extremely intensive, and discipline would be needed to make them happen successfully in a single-day format. But the benefits envisaged are that programme approval becomes faster and more collaborative, with no need to author lengthy documents for formal committees. Further, because the programme 'artefacts' and other information would be collated as the process runs, support staff intend to create a comprehensive database of granular in-depth data about the university's overall portfolio, without having to review a catalogue of programme specifications in a flat document format.

### *5.3 – Crawford University*

At Crawford University, decision-making about developing new programmes is very centralised, and was summed up by the most senior manager interviewed as a highly pragmatic matter, albeit one that can entail some finely balanced and hard-to-make judgements, depending on which new courses that are envisaged:

What we have is a process which has a markets intelligence group, which brings together marketing people, planning people, the course team, and others, to review whether a proposal has a market, whether there is any reason for it to exist. Is it just a whim, an academic whim that isn't necessarily - it's just going to consume time, which is opportunity - so we have that appraisal. That's a really tough thing to do, because market appraisal of future courses is a bit of a stab in the dark, in some ways. Some areas are well established and you can see where you're going to go for share of market. Others are much more speculative. Do anything in the AI and big data space at the moment, everyone knows it's interesting but no one actually has an idea about whether there is a market. Ultimately, designing a brilliant course for no one is pointless. The reality and the abstract have to fit together rather nicely.

(Hassan, Senior Manager, Crawford University)

It is also the case at Crawford that new developments may emerge from existing provision, not unlike the scenario at Devlin, where course already running spawn new ones, or alternative modes of delivery or other 'angles' for bringing a course to market emerge:

Different ones have come through in different ways. So, sometimes they have come through because perhaps the existing course has run through its lifetime. It's not as valid as it was. Things have moved on. Then there's also the external [factors] - we need to do this because X university down the road is doing it and we need to now be in a space we've never been in before. So sometimes it could be emerging because of a new market that's perceived. Then there's also the... "it's working in this way so let's give it another flavour and see if that's going to work".

(Janice, Lead Support Staff, Crawford University)

The processes for new programme approval at Crawford are also strongly regimented. For example, when a new course comes into the process, different departments are given strict time limits to respond to the programme proposal (e.g. 5-20 days, varying according to the activity involved), in prescribed stages, to keep it moving through the system. These timetables are centrally monitored and managed. Once a proposal reaches the relevant governance committee at the whole university level, the programme has already been approved and the committee's role is to have oversight of the evolving portfolio and the overall performance of the approval system – not to re-open debate about individual programmes. Likewise, the process for programme development is extremely regimented and consistent across the university. In addition, a common framework is placed around the in-depth programme design task within the university. However, management takes a liberal view on the actual practices through which people in the university respond to the requirements of the framework, without obligating particular approaches. For example, the development framework mandates a designated course director, who leads the process, to convene two formal meetings – one at the start of the process at which the learning outcomes are defined and one at the end where the programme documentation is reviewed prior to submission for formal approval. However, within these strongly defined parameters, different practice approaches are permitted and encouraged:

Now, theoretically, you can have as many meetings as you want in between those, but that's almost a start point and an end point. In practice, some have lots of meetings. Those ones can be, then, quite effective, in terms of, you're having that sort of iterative conversation that leads to that collaborative and agreed end point. In some cases, it still can be that somebody disappears into a darkened room and re-emerges with documentation that people are then seeing for the first time, and then considering that.

(Kareem, Lead Support Staff, Crawford University)

It is open to programme developers to make their own choices of methods and techniques in that in-between space, where responsibility is quite devolved, and design-based approaches are used in some contexts and situations, where programme developers choose to use them, but this is not a requirement:

There is work in the institution, using sprint methodologies, to bring in, as a different approach [...]. So that more agile design type thinking, as a means of going back to that idea about it being a collaborative process, and the decision making that's required as part of that. [...] It was piloted with a course team who were interested, and as I say, it's now offered... I'd say not every course team engages with it. I don't think, realistically, it could be [done that way]. I also wonder whether it actually is applicable to all course teams, because I think there needs to be some flexibility in that.

(Kareem, Lead Support Staff, Crawford University)

I mean here we do a lot of sprints, taking a lot of perhaps project management type approaches, new approaches to how you might create online assessments, threshold type assessments. Looking at how those work, I think that's where it's making a difference and bringing that in for the better. [...] I think as the good practices emerge then we would, through our [academic support staff], disseminate those out as a, "Here's some good practice. Why aren't you using it?" Rather than, "You have to use it."

(Janice, Lead Support Staff, Crawford University)

The exception was in the development of courses for online delivery, where the expected approach was explicitly designerly in both character and technique, with a foundation in the essential multi-skilled structure of a 'design team', working in a studio setting, and integrating those approaches to traditional higher education sector approaches.

So, yes, strange online witchcraft. So, we are a design team, so a studio design team, so, you know, [...] we've got learning designers, editors, there are graphic designers in the team, media producers, videographers, the whole mix. A lot of these individuals are multi-skilled people now. They used to be quite separate roles if you go back ten or twenty years. So, the model for producing is very much what you might see in the publishing industry and design industry for that. It's the way that then that integrates and works with the HE world, with the faculty, that's, kind of, the magic here.

(Lamar, Programme Developer, Crawford University)

At Crawford there is a generally inclusive attitude to learning and teaching models. One of the distinctive features of senior and supporting staff interviewed at Crawford was their readiness to volunteer specific conceptual models of programme design, and weigh them up, but without a centralised position or management weight behind a specific model or models. For instance, one interviewee referred to the work of Diana Laurillard (2012, referred to in chapter two), another to a model of "backward design" (Wiggins & McTighe 2005). In one instance the explanation of why no single model should be subscribed to became rather humorous:

You look in the past, there was a rash of curriculum models [...] We had Stanley Frielick's Zone of Ecological Development in Course Design, which had a double helix running through the middle of it. And, you know, there's lots - I don't think they ever helped us in how we design courses. We had the - what was it? Virtual Ouija Board - have you ever seen course design likened to a Ouija board, the pushes and pulls of how you locate your course, with all these forces? People making a real meal of course design and trying to model it. I don't think they ever really helped us in how courses are designed, I think it comes down to a clear set of guidelines and priorities, from an institution that helps frame that.

(Isaac, Senior Manager, Crawford University)

Several interviewees at Crawford felt that the specific design approach in online provision was starting to 'wash back' into ways of thinking about the design of on-campus provision. They described a rising tendency to use blended methods of delivery, borrowing ideas from the online programmes and forming hybrid models. One senior manager thought this interpolation of delivery methods would become fundamental to all higher education in the UK over the next ten years or so, and the university had begun to actively pursue it in some programme areas and inevitably would in others.

#### 5.4 – Bailey University

Bailey University has a very different typical starting point for new programmes than that which arises at Devlin and Crawford. Here, the main impetus for programme developments is quite devolved, where academic heads of department are encouraged to generate new ideas and bring them forward to senior managers and the central university machinery for evaluation as potential programmes to take forward. There is held to be an ‘open door’ approach for such proposals. Market analysis or external policy driver considerations are not so dominant or explicit as they are in the other universities, at least at the point of ‘first initiation’ (they are certainly not completely ignored, and they come into play as the process unfolds). At Bailey it is also more likely that the initiation of a new programme would be an individual effort, perhaps done with input from colleagues but without the constitution of a specific programme team.

Our academic community know that we are always keen to hear about new programme ideas. I mean not least because in our minds academic staff in terms of conversations they’re having with students and prospective students but also just by virtue of their relationship to the discipline etc. and key challenges, intellectual challenges, they should be good at innovating with regard to new programmes. [...] Throughout the academic year the heads of department will be in conversation with people from the [...] committee that has oversight with regards to the attachment of new programmes, not in terms of programme quality but just in terms of supporting new ideas and getting agreement with regard to go ahead of new programme ideas. So there are key points in the annual calendar where I and others would be meeting with heads of departments to hear these ideas and to talk to them through.

(Myles, Senior Manager, Bailey University)

It always feels like it is an individual who has either had a good idea or who has been running a programme that they have seen an opportunity to amend, modify, change, grow in some way, and actually that has become a new programme. I have yet to see – and I’ve spent three years on the [relevant committee] – somebody who started with, if you like: “Here’s the gap in the market. Here is the new problem within a particular sector or industry that my programme can change in some way, or problem solve, or meet the new skills gap.” Or, “I’ve been talking to colleagues in the FE sector or in sixth-form college,” or, “I’ve seen that BTECs are changing. We need to have a programme that will feed well from these places.”

(Nancy, Senior Manager, Bailey University)

However, there have also been some 'top down' programme initiatives at Bailey University, in which senior managers have sought to directly commission academic departments to develop a new programme concept. Some of these have been carried forward such that the new programmes have become part of the portfolio, in other cases they have not continued past the exploratory stage. This is important to note as an element of the university's innovation process. Although it has not led to many new programmes, some senior management and support staff interviewees positioned it as an important alternative route by which programmes can come into being. When programmes were taken forward, through any route, there was no evidence from the interviews conducted of design thinking being utilised. Indeed, one senior manager was clear that it was not used, although he was enthusiastic about the idea of doing so:

I know that we don't systematically utilise that across our academic programme development. I think very possibly we could or should. I think there's a lot of conservatism within the sector around delivery and how we teach and pedagogy. I think as a provocation thinking about design thinking in terms of designing programmes I think could be really, really super.

(Myles, Senior Manager, Bailey University)

There was some degree of tension evident between what programme developers wanted to achieve with programmes, versus the demands of the established quality assurance processes. There was some feeling that certain structures and rules associated with the quality model were acting as constraints, and part of the challenge of programme design was to know when and how to challenge those rules, or to circumvent them.

I think if programme development structures in universities were always allowed to work on the premise of innovation, ideas, creativity, what's best for the students, and let programmes kind of - not organically grow, but grow from seeds [it would be better]. It's always seemed a very logical process, for me, that's about structure and [quality] rules and how you achieve what you want to achieve, within the rules, and knowing when to push against the rules which you think are constraining, that aren't good rules.

(Quentin, Programme Developer, Bailey University)

[Quality] regulations do put quite a lot of structure in there that isn't exactly helpful. [...] [Such as:] "Oh, you can't do a Level 5 module at Level 6." It's like, well, really? [...] I mean, certainly, five and six, there's often not that much difference. In reality, if you were to step outside of the bureaucratic process, you can easily move a module between years two and three, for example, without causing much problem. So, there were a few straitjackets that we would have... design would have been a lot easier without those regulations.

(Pierre, Programme Developer, Bailey University)

In addition, one of the programme developers at Bailey University was focused on the online model. In contrast to the interviewee at Crawford University who described in-depth the design-based methods for creating courses for online delivery, the programme developer at Bailey used some similar techniques but did not characterise them as 'design-led'. This suggests there is nothing imperative about taking such an explicitly design-based approach for online delivery, and certainly reinforces the impression that the university has not adopted a strategy of using design methods.

Overall, it was clear that Bailey University did not use design thinking in programme design activities and had adopted a more traditional higher education sector programme development model. This does not mean the university is not innovative in relation to programme development. Indeed, several interview subjects described new programme innovations, including some that were highly divergent from the university's existing portfolio, in completely new subject areas (albeit one of those developments was discontinued at the approval stage). But these innovations often seemed to be in friction with established processes and structures. Bailey can be characterised as reaching consistently for exciting new departures and cutting-edge course concepts, but not using especially innovative approaches to developing them, and certainly not using design thinking in that endeavour. Asked at the end of an interview for wider reflections, a lead support staff interviewee at Bailey commented:

It has made me reflect on the things that we've got right and got wrong, how far we are pushing the envelope on design or whether we're actually fairly staid and traditional and that actually all of the innovation comes at perhaps a superficial level or our academic content level. We're not able to really design things that are innovative and new structurally. I think maybe that would be an area that is probably out of my direct remit but probably something we need to start exploring as an institution.

(Oscar, Lead Support Staff, Bailey University)

## 5.5 – Scher University

At Scher University, the university was in a similar space to Devlin and Crawford in relation to the strategic and market positioning fundamentals of new course development, but also adds an important dimension in relation to resource management and control. At Scher, professional services departments responsible for various functions seem to be brought in at an early stage of programme development. This will be of interest in counterpoint to the vignette quoted earlier from Trowler & Knight (2002: 153, page 23 above), which exposed how resource implications can often be forgotten when new initiatives come forward.

In all cases, it starts with the business case. I chair [the] institutional committee which looks at new business. [...] The committee has representation from all the schools, has representation from the attendant professional services, so finance, one would expect, estates, one would expect, etc., and all of those relevant services that say, “Yes, we have got the capacity to do this programme,” from a pragmatic, business led point of view. Have we got the space to put the programme in? Are the resources and the books in the library? Can we resource it effectively, essentially? The [committee] considers three things: one, financially, is it going to wash its face in an appropriate time? [...] Two, is there a demand for it? [...] Finally, is it strategically aligned? [...] It needs to satisfy those three things and that is the first stage.

(Shane, Senior Manager, Scher University)

However, seen through the other end of the organisational telescope, programme development can seem much more mechanical, especially where programmes are substantially revised or overhauled, rather than come forward as entirely new creations. At the front line, it may be the case that novelty or innovation in a programme is achieved without changing the basis structure at all, and that programme development might be rooted in within existing modular frameworks and the implementation of academic quality policy. There was an expectation that programme design work would eventually develop within professional academic roles, with a sense of inevitability that this role would come, and when it does come it would be underpinned by personal experience of programme developers with long-established quality principles.



If you stay in the profession long enough, you're going to get a chance at programme leadership and it's always going to be programme leaders who are asked to design the courses or lead the design of courses; [they] can probably drive the curriculum design and quality principles because they've been in the university a long time. [...] Essentially what we had to prepare was a new version of the course that could have as many of the existing modules as we wanted, but the existing modules all had to be gone through with a fine-tooth comb, particularly things like outcomes and aims because the quality enhancement kind of view on those changed a bit since 2015, so I particularly went through those closely on the modules that we otherwise left alone.

(Vernon, Programme Developer, Scher University)

In contrast to this, there had been some innovative utilisation of more designerly approaches, also across the whole university, but to some extent the nature of those approaches as design-based has been muted, or at least elided with more conventional and established higher education practices. As at Devlin the move has been strategic and driven by senior managers, but the impetus for making the move has differed: while at Devlin the change agenda has been pursued to speed up future programme development and approval, at Scher the motivation was to rapidly *review* the existing programme portfolio. That having been done, the design-based approaches have been retained within programme innovation activity. Some of the language and technique expected in design thinking has been 'borrowed' to implement this process, however this does not go as far as it does at Devlin; the design methods are intended for widespread use in the university as a supplement to conventional approaches to programme development and approval, not as a total replacement. While the initiative at Devlin University is intended to be overtly telegraphed as 'product design', at Scher this aspect is only tacitly promoted beyond senior management and central support functions. This is not an attempt to conceal what is being done so much as it is a way of promoting design-based approaches without causing unnecessary friction, by balancing them in practice with processes that are already well known and understood by programme developers.

It can give a framework and I think it's what we've done, though we're using very different language, with the curriculum design workshop that happens early on in the process. Because we're actually, yes, we're looking at the user journey, the student journey and we're looking at those touch points. [While] I'll talk to you about us developing a new product, I would never use that word when I was speaking to my academic colleagues. So, there's a little bit of, if you like, subterfuge going on. So that it feels like an academic endeavour, which it is, but we can, if you like, slip in the more design elements there, using language that will make academic colleagues feel comfortable, rather than alienated. It's a challenging thing to do.

(Ursula, Lead Support Staff, Scher University)

In terms of actual practice, the 'curriculum design workshop' is used to map student journeys, develop pedagogic choices, and plan assessment methods. As at Devlin, this process produces data that is input into a programme development database. However, the data items are not referred to as 'artefacts' and are not intended to replace programme specifications altogether. Unlike Devlin, the workshop process as a whole does not supplant traditional panel review for final approval – this still happens at a later date – although it has affected the way this is done, making it a quicker and leaner process as the end-point of a wider collaborative process. Of the design-type techniques used, student journey mapping has been given the strongest emphasis, where the aim was to cause programme developers across the university to internalise the notion of student journey as central and get away from bureaucratic conceptions of programme development:

The student learning journey has to be the goal and thread of the exercise, because otherwise, if it isn't hitting [programme developers] and they don't have to know it explicitly, but if it isn't hitting them then it's just waffle in the background. It's just more tick boxes.

(Shane, Senior Manager, Scher University)

To achieve rapid portfolio review, almost the entirety of the university's academic staff (>99%) were involved in at least one design workshop over a six-month period, facilitated by central support functions. Because this was such an intensive process, some front-line programme developers found it very challenging:

As part of the system, you have to hold a team event, [...] we knew it was going to be quite a gruelling day, [...] the second half was very, very detailed, exhausting, three or four hours of going through all the modules page by page. We did everything that had changed or was brand new in a lot of detail, and then things that were more established, where maybe the content of the assessment hadn't changed, normally only the learning outcomes or aims had been given a bit of a tidy up; we just looked at those for those modules. They were a bit quicker.

(Vernon, Programme Developer, Scher University)

Scher University has taken a heavily managed, strategic approach to programme portfolio review using a resource-intensive and carefully planned process that has utilised some design thinking approaches, overtly to some, but tacitly for most.

### *5.6 – Cross-cutting issues for the use of design approaches*

The findings presented above show how market considerations are of prime importance to evaluating potential new programmes and are generally in a position of dominance compared to other factors, such as personal research interests or policy drivers, though these will often play a role. These findings should be unsurprising in the context of a system environment in which market dynamics have been intentionally promoted and in which student recruitment is uncapped and unregulated. They also introduce some key issues at work within universities – centralised versus devolved initiative and decision-making, individual work versus teamwork, and some tensions between established norms and novel approaches. The purpose of this section is to draw out some cross-cutting findings directly concerned with the deployment of design-rooted methods and techniques, where they arise. This is guided by the definitions offered by Micheli et. al. (2019) in relation to recognised design attributes and techniques. While not all the key attributes of design identified by Micheli et. al. appeared to be at issue, some were involved in organisational moves towards a more design-based way of working, or in other cases stood as impediments to this. They were also substantially adapted for context as they developed in practice. These will be outlined here in three categories: user-centredness; collaboration and gestalt formation; creativity and experimentation.

**User-centredness.** A key tenet of design approaches is to putting user needs at the heart of the process, but some of the approaches typically deployed in designing for user needs are subject to complication in higher education settings. The first of these that presents in the data is that within these universities there can be ambiguity about who actually constitutes the 'users' of educational provision. While most participants considered students the primary

users, consideration of employers as potential users was very important. One senior manager summed up the conundrum, but ultimately expressed a clear view on where the balance is:

Students are the main users. Industry and commerce are the users of our students, society is the user of our students, but the students are the users. I see students as part of the community, with the academics, in the review and development and design. It's a little bit more nuanced but, yes, definitely students.

(Hassan, Senior Manager, Crawford University)

Nevertheless, in the four universities visited the needs and interests of both 'primary' student users and 'secondary' employer users were taken into account in programme design in practice, and finding the balance is a challenge for practitioners. Two of the universities, Devlin University and Scher University, had adopted clear corporate positions that all learning and teaching should be industry informed, but almost all the interview participants across the four universities discussed responding to employer needs in some way. Design thinking emphasises human users and the imperative of shaping products or services around them. Several participants suggested that student needs and employer needs are usually closely aligned, which mitigates the complication. But in certain situations, such as higher and degree apprenticeship provision, the employer was regarded as the *main* user, especially where one large employer has approached the university for a bespoke arrangement in which only their employees would be enrolled. Two universities (Devlin and Scher) had at least one contract of this type or were planning to engage in them.

Employers will also be saying something, which might be different from what the student wants. [...] An industry input into the shape of the programme will sometimes determine ways of doing [it], which if you were to ask a student, they might give you a different answer of what they might like.

(Shane, Senior Manager, Scher University)

Course design actually starts with some quite structural questions, if you like, for apprenticeships, that are allied to the employer... the need of the employers, first and foremost, because it's an offer to them for their employees. So, whereas I think, [...] designing standard undergraduate courses, you always start with the students in mind, actually we've got an extra forum, an extra thing here to think about, which is the employers, and what are their needs, and how do we design an offer that's saleable to them?

(Diego, Lead Support Staff, Devlin University)

Design thinking could also be a way to navigate these problems. Across all four universities, student journey mapping was the most commonly cited technique in use that can be associated with design thinking. Even at Bailey University, there was recognition in a looser sense that student journeys through their programmes are important and must be an integral part of the programme planning process. From a functional perspective, it makes sense that if it is the student's journey that is being mapped, then it follows that the student is the user in view. However, if the student journey is made central then the coherence of that journey, in terms of the extent to which the designer can shape it, becomes important. The four universities had very different structural frameworks influencing how far this could be controlled by programme developers. At one end of the spectrum, Crawford University maintained a policy of offering almost no choice to students over course elements – the university had made 'whole courses' the primary unit of organisation. While the programmes were still internally modular, there was little allowance for module choice by students, and certainly not across departmental lines. It was planned that some assessment would also be done for courses as a whole, and not at the modular level. At the other end of the spectrum, Bailey University allowed students very wide modular choice, often across the whole university, with comparatively little 'core' content requirements. In between these poles, Devlin University and Scher University had a mixed ecology in which often choice was restricted in the first year but then opened things up to a limited extent; the degree of optionality often varied between subject areas.

We want a course-focused approach to our course design, moving away from a modular approach. More and more we insist that modules shouldn't be shared across courses, that actually the course experience is really important to the students. So, the driver is around course experience and how we create a course experience, a coherent course experience, with a coherent assessment strategy, so there is an assessment journey for the students.

(Isaac, Senior Manager, Crawford University)

We've ended up with students having a smorgasbord of choice, but also quite a degree of movement in between our different academic departments and subject areas. [...] We're able to present students with attractive programmes with quite a range of topics and module choices but then has complexities at the back end where we realise that the student experience and timetabling cannot be managed effectively to meet the needs of the students.

(Oscar, Lead Support Staff, Bailey University)

These organisational choices clearly influence how programme design must be approached. It is notable that the university found to be pursuing the most overt design-rooted strategy – Devlin University – maintains a relatively open optionality framework; senior managers there implied they had looked at taking steps to reduce it, but concluded that this would not be well accepted in the university community. It has not been deemed a barrier to greater use of design methods in the round, but it is an important factor to be worked through. Meanwhile, at Crawford the imposition of a whole-course approach does not also correspond to the imposition of a design thinking approach. In the case of Bailey, with its highly liberal range of optionality and absence of designerly techniques, these factors seem to be related quite strongly. However, in two universities (Devlin and Bailey), participants cited examples of programmes that were allowed to sit outside the normal modular framework in various ways (often by having an ‘extended project module’ covering almost all of the final year), suggesting that if the design aims matter enough, structural rules can be bent to accommodate them.

It is important to note that there were user-related issues that were important to programme design, and made the challenge of programme design more complicated, but did not appear to complicate the potential for using design thinking to address that challenge. This is a key distinction, because while there may be many factors making programme design more challenging, this is not necessarily a reason not to use designerly approaches – indeed the reverse may be the case. For example, interview participants discussed the growing importance of considering student diversity when creating (or revising) programmes. Many of them talked in great depth about how this had become an area of priority for the university or represented in their view a fundamental shift in the whole nature of higher education. In one university, senior management had put in place a long-term cross- university initiative aiming to create a far more culturally diverse curriculum in all subject areas within five years. Such concerns are not, however, special to higher education – many organisations across many sectors are engaging with similar diversity questions. This factor may make designing harder, to meet an important social challenge – but it doesn’t make it harder to use design.

**Collaboration and gestalt formation.** Design approaches call for both inter-functional collaboration between different organisational units in the design task, and the formation of a holistic conception of the user experience, including the widest range of aspects to that experience, and many different ‘touch points’ of different kinds. There is a propensity for programme design in higher education to be at its heart quite an individual activity. At Bailey University this was certainly the general norm, but in the other three universities it was evident that a great deal of the design effort at the programme level was often concentrated with

individual programme developers in practice, even where a university's overall approach was to require the establishment of course teams or run development 'sprints'. Only in the online development space was a true studio-type approach used, with people of different backgrounds and skills brought together intensively to do development work (and this approach was not used in all cases of online development that were described). To achieve consistent collaborative working might require significant cultural change:

Programme design needs to be a collaborative process, and has got to be something that's open to those sorts of ideas to create something that's coherent. Because that's one of the key things about the programme design stage, is that you're developing a coherent programme of studying for the students. It comes back to that journey aspect. [...] I don't think that is consistently occurring across the institution. It seems, very much, that it's one person's – the course director or whoever – role to do that. So there's, potentially, a cultural shift that needs to happen.

(Kareem, Lead Support Staff, Crawford University)

Even where universities are using design approaches, either on a widespread basis or in pockets, there remains a confinement of scope for programme designers that can make it hard to reach across into ancillary areas of the experience and influence their design. The reverse is also apparent – the interviews gave the impression that there is little room for professional services perspectives to reach into the core of the programme design activity, although there a greater degree of this was seen in relation to the initial business case stage. At Bailey University, with its very wide modular optionality (combined with quite restricted physical space), timetabling was especially critical. At Crawford University it is apparent that at least part of the reason to take a 'whole course' approach is so that it becomes easier to manage organisational matters such as teaching workload and space allocation. However, professional services personnel are often not very involved in the programme design process. At Scher University, a cross-departmental project has been run to reduce the amount of 'assessment bunching', where too many students had assessments at the same time and/or some students individually had too many assessments occurring in parallel. But this is not necessarily seen as a programme design issue at all, even though it is recognised as being important to the student journey, which itself is regarded as fundamental.

I have seen careers people involved in [development] sessions, but none of the other [professional services]. I think there's a fairly narrow conception, still, as to what is a course team. It is limited to course leader, and even the people who lead on the modules. Not even, necessarily, all the people who teach on the programme, let alone bringing in that wider professional service support as well.

(Kareem, Lead Support Staff, Crawford University)

It's assessment management and basic organisation and management in a programme team. Does it fundamentally shift the learning outcome of the programme? No. Module outcome? No. Learning journey? Yes, it takes the pressure off and it means you might have to shift around the week of teaching. Is that fundamental to programme design? [...] No. It's organisational management.

(Shane, Senior Manager, Scher University)

The distinction between programme design and programme organisation may be managerially useful and appropriate to the situation at hand, but it is also an impediment to achieving holistic design. Notably, where interviewees were involved in programme design for online provision this seemed to be less of a concern, perhaps because where the vast majority of 'touch points' are digital they become easier to understand and map in relation to user journeys. However, participants focused on online provision were often required to work with external third-party delivery partners (other universities or commercial businesses), and this imposed restrictions and constraints on the design activity because the partner had already well-established processes. At Devlin University, an attempt will be made to integrate professional services into the design process in a more managed way through a 'blueprint review mechanism'. This is at present untested in practice and does not entirely seem to address the problem of holism, but does suggest the issue is being engaged with as a design problem. The university is aiming to improve internal collaboration through process change.

We've got the course team developing the design, and at the same time we're having a viability-testing phase [...] What happens is we've got the blueprint emerged from day one, and then that will... [...] that will fire off to all those people, all those other professional services who often, in the past, don't get to hear until after the event and it's all been agreed, so estates, student support, timetabling, employability – although they'll have been more heavily involved, and finance.

(Elena, Lead Support Staff, Devlin University)



**Creativity and experimentation.** Design thinking is held to involve creativity, problem solving and collaboration. There was a mixture of perspectives from participants on these dimensions. For some programme developers there was a sense that programme design was an inevitable professional activity that they were always going to engage in. No programme developer participants had come into higher education specifically to do programme design, although several, at a more senior level, had taken on a role that was focused on creating new programmes in their department. Some programme developers certainly viewed their practice as a creative practice first and foremost, while others were more likely to emphasise its technical aspects, especially in relation to quality assurance such as developing programmes that meet sector-wide norms in terms of curriculum content ('subject benchmark statements') or specific structural devices (especially in defining 'learning outcomes').

I've never been deterred or intimidated by the idea of instigating, designing, innovating new programmes. It's always been something that just seemed, "Of course you would do that."

(Quentin, Programme Developer, Bailey University)

You look at what you're starting with, and you look at what you want to end up with. So, I'm thinking in terms of students now. [...] This is what's coming in. The skills they've got, the things they've done. This is what I want to go out. And then it's looking at, "How am I going to get them from there to there without killing them, frightening them off, or terrifying them?" [...] I wouldn't describe myself as, in any way, a creative person, but I do think I'm a creative problem-solver.

(Frieda, Programme Developer, Devlin University)

A significant complication relates to the emphasis within design approaches on experimentation, prototyping and user testing. This presents real difficulties in practice. In the first instance, there is no culture of these kinds of methods in higher education; this could lead to acceptance problems if attempting to bring the methods into use. But even if accepted, there are additional problems in relation to the notion of testing new programme concepts on actual students, especially if they are radical departures from existing practice and/or the entire programme is highly innovative. It is apparent that this could restrict innovation and could certainly frustrate the use of design methods.

If you think about it, if you write a whole three-year programme, you could be writing, like, eighteen to twenty-four modules, with options. When do we test them? We don't – we don't! If you were going to do a whole project there, you would at least take those elements and say, "I'm just going to go and do a little focus group with some sixth-form students or some first-year students," wouldn't you?

(Nancy, Senior Manager, Bailey University)

We can't sort of [do] large-scale play with our students' learning experience. So you can't suddenly go, "Right we're just going to do all lessons [in an external location] from now on and see how happy you are." Because if you're not, we've done you a disservice for something that you've invested in.

(Janice, Lead Support Staff, Crawford University)

We have not, I think, involved students in prototyping courses enough. It's easier when you're working with a partner, like the health trust and you've got some nurses there who are going to do post qualification accredited learning with us, because you can sit down [with the students], you can prototype the course and say, "Would that work?" You could get them into the design process.

(Alexis, Senior Manager, Devlin University)

One potential way to address these complications is to separate the design and delivery roles – with programme development and teaching treated as different practices. This was already observed to be the case to some extent for online provision. Notably, the equivalent separation would not be uncommon or unusual in a wide variety of other sectors or indeed in some other learning and development sectors. Most participants did not regard this as the best solution, although there was acknowledgement of differing viewpoints on the matter and recognition that it was important to challenge the idea that advanced disciplinary knowledge on its own was a sufficient foundation for high capability in programme design. It was apparent that there would be little immediate appetite for creating additional design-specialised non-teaching roles, making it difficult to envisage bringing in new people with expert design training. There might be other ways to incubate the relevant attitudes and techniques in a non-specialist workforce, and this is an aspect of what has been done in portfolio review at Scher University and is planned for new programme development at Devlin University. However, the success of this is still quite contingent on the scope and reality of collaboration, as discussed above.

My perspective is that if it's separated too much, you lose what a course is meant to be and I think that's when you get to the pile-them-high, teach-them-cheap courses where you have somebody over there who writes [and someone here who teaches]. I think there is an element of the expertise of design approach, but that's a technique and a tool that I think should go back into the course team to utilise not for the actual writing to be done 'over there' [...] I know across the university, many of us have very different views on that – very, very different views on that.

(Janice, Lead Support Staff, Crawford University)

We recognise it as a distinct thing, function, in a wider process of enabling the student experience, but that distinct thing, because of the nature of it, does not sit in one place. It's not, "That team are responsible for programme design. Go to see them if you want a programme designed." Actually, it's this is a capability that the university absolutely needs to have but actually it's a richer capability when it's shared and there is a group of experts brought together to design a programme, to enact that capability.

(Shane, Senior Manager, Scher University)

### *5.7 – Summary and principal findings*

There is some evidence from one of the universities – Devlin University – which suggests new design-rooted approaches can be adopted on a widespread basis as part of a strategic process, although the attempt to do this was very much a work in progress. There was concern amongst senior managers and support staff to ensure that programme developers could see and experience tangible benefits from the radical change of approach being pursued. In the case of Scher University there was some evidence of design being deployed as strategy, but the extent to which it was intended to fully embed design-led methods was not as substantial. There was a reluctance amongst those at the organisational centre to talk openly about how using design approaches might be seen as radical or a challenge to established practices – instead, people in senior and supporting roles were taking some effort to integrate new design-based ideas about how to do programme development with existing norms. At Crawford University design methods are used extensively by some programme developers, especially in relation to online provision, but there has been no attempt to instigate a whole university strategy based on design. There was apprehension about how far the centre could go, or should go, in imposing particular approaches to programme development – there was a sense that the parameters within which people at the front line had to operate were already very tightly defined in relation to issues such as the development timetable and course shape and

structure, and this rigidity had perhaps reached its limits. At Bailey University there was no observed use of design-rooted approaches, and apparently much less scope to experiment with such ideas. Senior participants had not contemplated the use of design thinking, and they also conveyed a strong impression that the university is institutionally quite conservative in relation to such practices, which itself may act as a cultural limiting factor on even conceiving design approaches.

The data suggest that higher education programme design is an activity governed by a range of already-instituted practices, the strongest of which are an adherence to longstanding quality assurance processes and a tendency towards working individually. These norms can impose considerable constraints on the freedom to use novel design approaches. They appear to remain strong even where senior figures encourage the integration of new ideas and models with quality assurance expectations and encourage, even mandate, team working in programme design. It is perhaps an unsurprising picture for a sector that maintains a very high degree of professional specialisation and remains by default quite bureaucratic, which can be seen for instance in the copious documentation and formal committees to which interviewees referred. Indeed, in many cases it was suggested the focus could sometimes be on the documents, not on the substance of programmes, and this was a source of frustration for some. As we saw above, two universities were making moves to relieve, to some extent, these burdens. Quality assurance procedures and protocols seem not to be adored, but they are regarded as both a scaffold of reassurance and a place of common ground enabling people to work quite individually without going in totally different directions or adopting divergent standards. In most instances, front line participants indicated that they worked on their own initiative and conformed to a long-standing set of codes and norms understood widely across the sector; this was not framed as an undue restriction but rather just a fact of academic life.

This analysis can be distilled into the following principal findings:

1. Design thinking has developed in the universities investigated in two distinct ways:
  - i One mode of development can be described as 'systematic' – in this mode, senior managers have mobilised design thinking as a concept, using it to instigate broad change in programme development and approval processes across the university, with aims to increase the speed and efficiency of those processes, and centralise a focus on 'the student journey'. In doing this, managers have required of professionals the adoption of versions of some of the classic attributes, tools and methods associated with design thinking.

- ii Another mode of development can be described as 'enabled' – in this mode, design thinking has been chosen by professionals as a way of responding to programme development challenges, adopting for themselves some of the classic attributes, tools and methods associated with design thinking; senior managers have not instigated this or sought to expand it, but have supported it by taking an open view on pedagogic approaches, backed with resource allocation and structural change.
2. In both 'modes' these developments have modified established practice but not displaced all aspects of established practice. There were significant inertial factors weighing against the development of design thinking attributes, methods, and tools in practice, which were underpinned by certain instituted structures and norms. The main inertial factors observed were the strongly institutionalised position of the existing quality assurance system, barriers to collaboration / tendency towards individuation, and some reluctance to engage in prototypical or experimental work with students. In both 'modes' managers were attempting to challenge these inertial factors through certain kinds of action, for instance by removing or reducing an emphasis on quality assurance as well as routines and bureaucratic activity associated with quality assurance, or by setting up new kinds of pedagogical support functions in central, non-academic departments.

These findings, however, are conditional on the view, elaborated earlier, that practices do not operate within sealed organisational vessels, and we also need to consider the extent to which forces in the external policy environment might shift the dynamics which shape them. This is the subject of the following chapter.

## **Chapter Six: The influence of the policy environment on programme design practice**

### *6.1 – Chapter introduction*

This chapter presents detailed findings from the fieldwork in relation to the second research question: *To what extent do pressures from the policy environment influence or condition programme design practices?*

As we have seen in the previous chapter, programme design involves a complex system of practices within universities. Professionals and managers take many external factors into account when developing new programmes. This certainly includes the extent to which there is a market demand for envisaged programmes and often includes an assessment of the needs and views of employers, but there are a wide range of other potential external influences on programme design practice emanating from the policy environment. This chapter considers the specific influence of these policy factors as a distinctive external factor – distinctive in that, as discussed at length in chapter two, policy effects can result from the intentional action on the system by outside agents, through a range of policy tools. This strategic action may be entwined with practice, changing and reshaping it. Alternatively, practice may be resistant to this pressure. The chapter begins by examining the influence of prescriptive policy interventions – those where rules, procedures or conditions for provision are imposed by external actors. It goes on to consider wider government influence through regulatory policies, the impact of this on the status of quality assurance as a policy factor, and how far programme design practices are changing as a result.

### *6.2 – Prescriptive policy interventions*

The range of policy tools applicable to higher education systems include some tools which can be characterised as prescriptive interventions in provision. In higher education this would generally include any intervention where an external policy actor prescribes specific and detailed requirements to be met by programmes of particular types, or they may be policies whereby governmental bodies directly commission programmes meeting a particular description, possibly also directly funding those courses or providing capital grants for universities that offer them. Several examples of differing kinds of prescriptive interventions were encountered in the data collected. The most common form of intervention seen in the data related to professional bodies. Most participants referred to meeting requirements set down by external professional bodies, either as an important part of the development process generally, or in specific relation to certain programmes. While it might be possible to regard

the professional bodies as another potential 'user' from a design theory perspective, this would be to misrepresent the power relations at work – professional bodies appear to exert considerable direct power over a range of curriculum and pedagogical matters in a way that is not analogous to those matters being shaped by designers creatively around users' observed or expressed needs. If there is a design analogy for professional bodies, it would be much closer to that of an external authority specifying aspects of the design brief. Practitioners face constraints imposed by these specifications and must abide by them to avoid a situation where their programmes lose external accreditation, which could be very costly in reputational terms and in the student recruitment market.

They have particular requirements. However, sometimes the requirements change over time and you don't always pick up that their requirements are changing. It's really important for certain courses that they are professionally accredited so you would have to listen to what they're putting forward as intended course design.

(Tameka, Senior Manager, Scher University)

Whenever participants referred to professional bodies, it was clear they were regarded as a very important stakeholder. In some cases, design decisions were made very actively towards meeting the changing positions or requirements of professional bodies. In one example, a programme developer was reacting to the inception of a new professional examination regime, which had arisen after the professional body in question had changed its own legal status, putting it on a statutory footing. In this case, it was felt that quickly developing a course to respond to the new examination might confer a market advantage:

When I was drawing up the programme, we already had a basic understanding of what the [new professional examination] was going to look like, so I took a conscious decision to incorporate that into the teaching and into the curriculum. And that means that we need to find ways to embed elements of this professional examination into the degree. And the three ways in which we do it is to basically embed elements into the lectures and seminars, to some extent. And also into assessments, so we need to test that knowledge the students will acquire. Secondly, to bringing professional experts [...] to do one-day workshops or two-day workshops in this area. [...] And, thirdly, we are incorporating [preparatory] knowledge by having a module [specifically aimed at the examination].

(Rashad, Programme Developer, Bailey University)

However, in another example, it can be seen that the requirements of professional bodies can also be a source of frustration for programme designers, who may seek ways of circumventing (or at least re-interpreting) professional body requirements:

I would quite like to have very few exams - because of the practical nature of our courses, I would like to assess that, but I can't because of the [professional body]. And the university would be happy with me having fewer exams, but the [professional body] wouldn't, at the moment. It's changing, but it's changing very slowly, and I'll be long retired before it actually... we have a free hand to assess as we please. So, what we have to do is start getting creative about what an exam means. In that, they say you've got to have an exam, which I interpret as being a piece of work they've got to do in a particular length of time, and they don't know what's coming. I don't necessarily interpret it means they're going to have a list of questions that they've got to write down [answers to] on paper.

(Frieda, Programme Developer, Devlin University)

Importantly, both of these examples give an impression of centralising user needs, albeit putting them in the context of professional body requirements. Though one is focused on meeting the requirements and the other on bypassing them, each design choice was motivated by an assessment of what best serves the interests of the students on the programmes – in the former case to better prepare them for a professional route if they wished to take that route, in the latter case to help them achieve better outcomes in assessments.

Central public bodies may also take on a prescriptive intervention role, using different kinds of policy instruments. For example, they may impose requirements where specific provision is directly commissioned and funded, either through a competitive tender or other form of grant mechanism. In some higher education systems this would be a substantial part of the policy mix, but it is an uncommon form of intervention in English higher education, where almost all the funding for teaching is channelled through the general student loan and formula-based funding system. However, there is always potential for universities and practitioners to be pressurised by government into accepting such commissions and contracts when they are developed. There was some evidence in the four universities that they had considered engaging with such initiatives, albeit not at a significant scale involving a high volume of provision directly contracted or funded by government. Where examples of this kind of clientelism did arise, they were very strongly influenced conceptually by government demands, but were quite tentative in terms of what might emerge as outcomes. The examples invariably related to government interests in increasing or changing the form of various kinds



of provision in STEM subject areas. Participants often indicated that the prospects for these initiatives are very uncertain, or they had looked at potential initiatives but ultimately decided not to get involved.

We are having a look at Level 4 and Level 5 [technical] awards and seeing what that means. We have had some quite interesting discussions with the Department for Education around that, and what that might look like here. [...] The route through from T Level into that Level 4 / Level 5 might be a better route for some students. But I'm really not sure how T Levels are going to play out against BTECs and whether or not FE colleges understand them. Even the ones that are doing the pilots say that it's very messy, it's not clear.

(Tameka, Senior Manager, Scher University)

[We] have been directly influenced by government agendas. I'm thinking of the focus on STEM leading us to try and develop more programmes relating to the STEM areas. [...] We considered a big [...] project for a very long time that we thought would respond to the government's desire [in a key STEM area]. [We] decided not to pursue that. That got very close. That got very, very close.

(Oscar, Lead Support Staff, Bailey University)

We've not gone the whole hog with the government thing. [Another university] is doing the [government] thing. It's a two-year degree, but the students don't have summer holidays; they're treated as normal employees. They get five weeks off a year, or something. And they're very much going, "We want bright minds. We don't care what A levels you've done." But, on the other hand, they are having to do remedial maths with students that don't have [the qualifications].

(Frieda, Programme Developer, Devlin University)

In none of these instances was there any suggestion that universities or practitioners would engage in major changes to programme design processes or practices to accommodate such initiatives, and indeed the prospect of having to do so was the key factor for not proceeding in that direction. This is in contrast with one policy intervention which three of the four universities have entered into at significant scale, and which have required adaptation of new design practices – higher and degree apprenticeships. The apprenticeship model has also been instigated in response to a perceived lack of technical and vocational pathways in education at all levels, including higher education. The model stipulates certain rules that apprenticeships must meet to be eligible for funding, and some of these quite directly influence programme

design issues. There is a requirement for the apprenticeship to include a minimum of 20% 'off the job training' – though in practice, this threshold is invariably treated as a quota and is not exceeded. The salient point for programme design is that these programmes, from the higher education practitioner's perspective, are always part-time (much more so than other part-time programmes); the students' experience however is very much full-time, and quite intensively so. There is also a requirement that formal assessment for the apprenticeship award is a 'terminal' assessment carried out at the end of the programme. This is not in line with mainstream practice in the higher education sector, which has an established approach to continuous assessment in most programmes.

Several adaptations in practice were apparent. There was a widespread view that the structural rules for apprenticeships were an impediment for programme designers in practice, who really wanted more flexibility. In the previous chapter we saw how university structural rules could sometimes be flexed if design aims were strong enough to warrant it, but it is apparent that no such flexibility is allowed in this externally imposed and controlled model. The universities had clearly developed specialist staff resourcing to develop apprenticeships and support staff in other departments who had no experience with the model. In common with some online provision, apprenticeships thereby attract some separation of the design role and the teaching role, and indeed there was quite a lot of usage of online learning tools within apprenticeship provision in a blended learning approach. Participants did not think that the policy intervention reaches directly into pedagogical choices, and this aspect of design practice remains more open than structural choices, although they did believe that meeting the structural requirements required a different approach to teaching and learning, including flexible learning and use of digital tools. The data also reveals a further complication of issues with ambiguous user identities, with some participants suggesting that apprenticeship design can struggle to really be user-centred in relation to either students or employers.

What the apprenticeship often imposes are structural things like whether it be day or block release or whether it be online or blended, those things then, therefore, have an impact on the pedagogical approach. [...] I think, you can adopt whatever pedagogical approach you wish to meet those standards. It isn't necessarily, in my opinion, that the standard mandates what you do pedagogically. [...] We now have policy specifically around course design for apprenticeships which is helping, it's helping move everybody's thinking. You have to - I'm sure you will recognise that course teams, over the last three years at the university, have had to move quite a significant distance.

(Diego, Lead Support Staff, Devlin University)

That has been a bit of a learning curve for us because the creation of the standards gets rid of some of that innovation that you might want to see, and it's quite prescriptive. For us, I think we definitely like to have more latitude in the way that we design things and it is quite a slow and bureaucratic process as well. The way the standards are agreed and the way the attendance is determined, and the way the assessment is structured is quite a prescriptive model. I mean, we operate within it but the challenge for us is, employers don't understand that inflexibility. So, they come to us and go, "I want 'X'," and we go, "Oh, well, the nearest thing to it is 'Y'. is that alright?" And they go, "No, I want 'X'".

(Tameka, Senior Manager, Scher University)

There were also circumstances within universities where meeting the requirements of professional bodies as well as government agencies in relation to apprenticeships, at the same time, became challenging. There is significant potential for competing or contrary priorities, where those differing requirements might be at odds, and in that scenario, it can fall on universities – and programme designers within them – to reconcile these factors. This can pose a particular challenge for practitioners using journey mapping techniques to chart and understand how students make progress through the programme towards different learning objectives.

So, that particular [professional] body sets some requirements for the standards that people need to meet as part of the degree award, and so therefore you're mapping not just the degree award to the apprenticeship standard, you're also mapping that degree award to a professional regulatory body as well. And therefore, as a design challenge, that becomes quite... sometimes we end up with some quite intricate mapping of outcomes as part of the programme of study, which can be quite challenging.

(Diego, Lead Support Staff, Devlin University)

There was some evidence to suggest that apprenticeship policy might be having an impact on programme design for conventional courses, raising the possibility that although the policy intervention is focused on a particular kind of provision it may be vicariously influencing practices more widely. One participant felt this was happening at Devlin University (although others in the same university were not so sure apprenticeships were making a widespread difference in this way):

A lot of the resources we're using to deliver flexible learning [in apprenticeships] are definitely crossing over into undergraduate programmes. We use [a software tool] which engages online learning and resources. That's been used in apprenticeships a lot because it has to be for audit reasons and other purposes. Those learning methods are going into the normal full-time degree programmes as well. They're definitely informing and they're definitely making the provision better, I would say. Because we're so engaged with employers the feedback on how modules are being developed and being run is also feeding back into full time programmes, so they can make their experiences more exciting as well.

(Calvin, Lead Support Staff, Devlin University)

Whether or not the policy intervention around apprenticeships is having a wider impact, the three universities in this study which offer them now recruit something on the order of 1,000 apprentices per year, and across the sector there are many thousands of higher and degree apprentices, so this is happening at significant scale. It seems apparent that the policy framework does reach into programme design practices to at least some extent, although some aspects – particularly in terms of pedagogical choices – seem to remain more autonomous.

### *6.3 – New regulatory intervention and the turn to metrics*

Most higher education provision in England is not subject to these prescriptive forms of intervention. While a significant portion is subject to external professional accreditation, and in some more specialised universities this may apply to most or all programmes, no single professional body has a remit going across *all* provision. While higher and degree apprenticeships are growing in scale, they still represent only a small fraction of programmes overall. There are policy interventions that do have much wider scope, but they use different policy tools. Regulatory tools rely on the principle that direct intervention can generally be avoided if universities agree in advance to a broad set of rules, conventions, and standards, and then adhere to them on an ongoing basis. Recent reforms in the English system have been focused on establishing a regulatory framework that puts this principle into effect, as described in chapter four, and the centrepiece of these reforms has been the creation of a new regulatory public body, the Office for Students. The category difference between these two forms of intervention is imperfect. While the basic common regulatory framework is 'prescribed' by the central regulator, the framework acknowledges that universities will be handled differently, due to their differing characteristics, portfolios of provision, and risk profiles. Intervention thereby depends on behaviour and performance. An additional distinction

is that while the prescriptive interventions discussed above include aspects of regulation – for example, around academic standards – the general cross-sector regulation carried out by the OfS is concerned with how the higher education sector functions as a consumer market, as much as with matters like academic standards. One senior manager compared the Office for Students approach to other regulatory and inspection regimes:

[The OfS] has made the landscape less friendly. Again, I don't think necessarily it's what they're doing; there will always be regimes, we can go right the way back to the QAA Subject Reviews of the early '90s. Everything measures broadly the same set of experiences, in different ways with different measures. [...] The OfS is a different way and a different culture of measurement and the things they measure are different and the voice they use enacting that is different and as I said, less friendly. They are moving much more into Ofsted territory in terms of modus operandi.

(Shane, Senior Manager, Scher University)

These comparisons are important. The Ofsted approach to school standards involves direct inspection (including some no-notice inspection) actually in classrooms, alongside analysis of examination results and other data. This is an anathema to universities, which strive to preserve their autonomy from this kind of scrutiny. Encounters with Ofsted also have a reputation for being very challenging and stressful for managers and professionals in schools, and in the higher education sector to the extent that it is subject to Ofsted inspection in relation to teacher training and some provision at levels four and five. The Office for Students has not moved in the direction of carrying out intrusive inspections, although it does have statutory powers in reserve that could in principle be used to establish such a regime. The perceived move into 'Ofsted territory' seemed to be as much about tone and demeanour as it is about actual methods of scrutiny, and perhaps more so. The OfS has moved, however, to reduce the role of the sector-owned quality body, the Quality Assurance Agency. The earlier reference to QAA Subject Review (operating 1993-2001; see QAA 2003) is therefore salient because at that time it represented an attempt to operate a 'close up' observation regime, although this was based on an autonomous, peer-reviewed philosophy. A diminished role for a body established with the intention of being a 'critical friend' to universities may contribute to the sense of there being a less friendly environment.

Several participants amongst the senior managers and lead support staff indicated that the inception of the OfS and the way it had set about its work had impacted on their priorities and their approach to programme development. The foremost of these has been a strong shift

towards the use of metrics as the main vehicle for understanding and reporting on university performance. This includes the use of metrics to test whether universities meet, on an ongoing basis, the conditions of registration with the OfS. It also includes the use of a sub-set of those metrics to construct the Teaching Excellence Framework ratings, at the whole university level, leading to the award of Gold, Silver, or Bronze status (an additional 'provisional' status is available, but this only applies in cases where there is little historical data to analyse, and does not apply to most universities). The results of both processes are public-facing, and available to higher education applicants, though of the two it is the TEF ratings that are expected by policy makers to be the most widely used by people outside the sector. Metric data analysis is not the sole instrument used in these processes – the OfS also considers qualitative reports from universities in testing whether registration conditions have been met, especially in relation to matters specified as 'reportable events', and the TEF process involves a qualitative whole university submission as a supplement to metric analysis. However, the rise of metrics as the main facet of the key regulatory tools is substantially different from the previous regime, in which collaboration and peer review dominated and which was more focused on practice than on outcomes.

Participants were generally quite uncertain about the implications of this shift of regulatory emphasis. During the data collection period the OfS regime was still quite new and although the new requirements it sets out were 'clear on paper', this had not translated into clarity about what would actually happen – what action the regulator might take – in situations where the requirements had apparently not been met. Some participants at more senior levels were aware of the kinds of sanctions that could be imposed in principle, but the absence of a track record, not having had any time to form, had created uncertainty about how interventions might actually occur. Considering this, participants talked about how they had anticipated the likely orientation taken by the regulator – what it might look for, how this relates to programme design, and what action they had already taken in assessing these issues. This anticipatory action was strongly informed by the perceived shift to metric analysis, especially concerning outcomes and retention. There was an expectation that the OfS would not look at programme design directly but would instead look at metric evidence and consider programme design as a potential factor in any deficiencies observed. It was apparent that in responding to this there was a tension between making programme design explicitly a means to an end, to achieve stronger outcome and retention metrics, versus treating it as one contributing factor to achieving the right kind metric results, while continuing to respect its other qualities. There was also another tension evident – while it was clear that anticipation had taken place at senior levels, some senior managers had already taken action in advance within universities on quite a stringent 'top down' basis, while others had chosen to prepare to take action in the future if

a regulatory problem were to arise. It was apparent that there had been careful consideration of how the regulatory system might require changes to the programme design approach, and this created some pressure on practitioners, although this had happened in different ways: while in some instances the strong role of metrics was clearly telegraphed through management hierarchies, in others senior managers expressed caution about too explicitly acknowledging the desire for programme designers to respond directly to metrics.

I think we're less worried that the OfS would notice [design problems], but they will notice the outcomes. It can only be, again, that sense of where they find a problem, can they pin it back on programme design? [...] I think TEF and subject TEF are also part of that landscape, and ministerial muttering about low-value courses, and it comes right from the top. [The Vice Chancellor] is very clear that [Devlin University] will not have low-value courses, so that means us really concentrating hard on ensuring that student outcomes that we project, and that we can understand, are going to be well above anything that might be close to the OfS's thresholds.

(Bernie, Senior Manager, Devlin University)

I think [the OfS] would look at programme design from a point of view of outcome, as opposed to programme design from a point of view of pedagogical lilt, merit, character, style. I think they would come at it, perhaps appropriately so, from saying, "Look, these programmes aren't producing the outcomes. Is there something in the programme design?" [...] I think they would go, "That kind of outcome isn't what we want, could you please look at all levers you have internally, including programme design?" [...] I don't think it has changed per se how programmes are designed. I think within that design process, there are elements of, "we need to think about this," but I think that's at intangible level rather than, "we need to design this programme to get the best possible TEF outcome."

(Shane, Senior Manager, Scher University)

It was apparent in several ways that this trend towards greater emphasis on metrics has led to some cultural tensions within the four universities. All the front-line programme developers interviewed cited the importance both of responding to student needs and of creating the conditions that should lead to good employment outcomes. Most had used data drawn from the National Student Survey as a tool for understanding student views, they were aware of their university's TEF award, and were aware of their performance in the annual 'destination of leavers' (DLHE) survey. However, no programme developers were conscious of the

requirements of the new regulatory framework, or the role and powers of the Office for Students. In addition, programme developers rarely volunteered examples of interventions driven by metrics when asked to describe the external factors that influence their programme design work, instead emphasising the qualitative ‘voices’ of students and employers, as well as – as discussed above – the specific requirements of professional bodies. Participants in management and support roles considered that metrics were being used widely within the university but in discussion with colleagues they had encountered concerns about how far their universities should accede to the trend towards metrics, doubts about their value for practice, some gaps in capability for handling or utilising metric information, or cultural resistance to using them.

When I first came, probably three and a half years ago, [academic departments] had made some really good progress but they weren’t really that good at analysing the data and understanding what it meant. A lot of their benchmarking performance was internal. So: “we did quite well against the [Scher average] so therefore, we’re okay”. And I was, like, “Yes, but we’re fourth quartile in the sector. We might need to have a look at this.” [...] The other thing was, though, is that mythbusting around, “All the data’s just wrong. Our performance is much better than that. It’s just not captured in that particular survey”. So, [my team] had to do lots and lots of, “Well, where do you think it’s wrong? How much do you think it’s wrong by? Alright. Even if it’s 5% wrong, that’s still not where we want to be, is it?” So, there are lots of data literacy [issues].

(Tameka, Senior Manager, Scher University)

A lot of our discussion nowadays is about student outcomes and careers, longitudinal data, DLHE data, to make sure that we have evidential proof that our degrees are worthwhile, that we’re delivering something that benefits students and society. That data-based approach and that approach to considering employment outcomes is very much against the cultural grain of [Bailey University]. As an institution, we seek to try and find the polar opposite way of the existing mainstream, which then leads us into quite difficult positions with our graduates and our employability message.

(Oscar, Lead Support Staff, Bailey University)



I think it's our job to at least feed [through] the narrative around that and to be out and about [in the university] talking to people as widely as possible so that we can feed that back into that conversation so that someone isn't going off in a rabbit hole of design - [to] design a course that has no graduate outcomes and is destined to be low on the LEO score, doesn't fit the political narrative at the moment about failed courses effectively. It's my job to help translate that and to explain what that might mean which, to some people, might seem like undue concern for the current narrative.

(Hassan, Senior Manager, Crawford University)

This ambivalent or doubtful view of the use of metrics tended to be less pronounced in the two universities holding TEF Gold awards. These universities were using metrics more widely, and more readily, and had been doing so for several years prior to the development of the new regulatory arrangements and the inception of the TEF. This did not mean that in universities with TEF Gold awards there were no issues or reluctance around the use of metrics, but participants described using them in a more routine and more comfortable way. Participants in the universities holding TEF Gold awards conveyed a sense of satisfaction that they had been ahead of the trend in policy towards metrics and their anticipation of it had left them in a strong position. However, there was also considerable apprehension, even consternation, about the development of a subject-level TEF process, which they felt less well prepared for, and envisaged could become very problematic. At universities holding TEF Bronze awards, by comparison, metric-based scrutiny instruments had led to participants experiencing greater pressure, and the role of metrics appeared to be more contested. At Scher University there was acknowledgement that holding a Bronze award had brought additional pressure onto the university, but there was a strong reluctance to allow this to cause a significant reworking of programme design approaches, as well as a desire to instil calmness amongst colleagues and prevent the issue from dominating practitioner concerns. At Bailey University, holding a TEF Bronze award was seen by most participants in all roles as a strategic problem to address and solve, as part of a complex involving league table positions and student recruitment patterns. While specific instruments such as the National Student Survey were still regarded as useful tools for practitioners to consider, it also seemed they were felt more acutely as accountability instruments.

We don't want to be TEF Bronze, I think that is bad reputationally because we know students will think about it. We know league tables and TEF Bronze rankings will inhibit our ability to recruit the right students and the number of students that we need to make the institution viable. [...] I think it is probably without a doubt the biggest policy driver, biggest change that we've had for a long time. [...] Now it's very much, "How do we get out of TEF Bronze?" It's part of the vocabulary, it's part of the discussion, it's part of the strategic objective.

(Oscar, Lead Support Staff, Bailey University)

At open days, students ask me about us being Bronze in the TEF. They are asking questions about, "You got bronze in the TEF and [a nearby university] got silver, shall I go there instead, then?" I have to care about the TEF because the institution cares about the TEF. And I think it's important because it is a measurement by which league tables - the knock-on effect of all of that, you do badly in league tables, the students go somewhere else. You do badly in the TEF, you'll do badly in league tables. You do badly in the NSS, you do badly in the TEF.

(Quentin, Programme Developer, Bailey University)

I'm comfortable that the stress we're feeling within our metrics and the various tensions we're experiencing at the moment have very little to do with us enacting design positively. It's a lot more to do with the business as usual, the real nuts and bolts of the experience. [...] I think there is also a job to expose staff to that world, to the TEF metrics of this world, and to do the subject level metrics and say, "This is how to begin to think about your programme," but at the same time to say, "Remember, it's a different way of measuring what we've always done."

(Shane, Senior Manager, Scher University)

Negative or ambivalent sentiments towards the use of metrics were also subject to an important exception across all the universities. Many participants described how they had taken concrete action in relation to student attainment gaps – that is, observed differences between students of different backgrounds (e.g. ethnicity or disability) that cannot be explained by other factors. This was distinctive because invariably all four universities had taken action and none were operating from a provisional position, waiting to see what the regulator might do. It was also distinctive in that a wide range of participants in all roles welcomed these initiatives and, more specifically, the use of metrics to understand the issues and to reveal inequality trends and patterns that had previously been unrecognised. Some participants noted that efforts to tackle such attainment gaps had begun prior to the creation of the OfS

and the new regulatory regime. In all cases, however, it was acknowledged that public policy intervention through OfS, using devices such as access and participation plans as well as the Teaching Excellence Framework, had indeed sharpened and accelerated some changes in practice. These changes included changes to programme design, seen as an important mechanism for responding to the attainment gap agenda.

Clearly, all our course design now has to align with the key [policies] about student attainment, about progression, about achievement. Those are all, I think, now all foremost in, have to drive, course design. [...] Yes, equal attainment. I mean, we are a very diverse institution anyway, about half of our students are from BME backgrounds. A third of our students are international, or more than that. Equality of attainment is crucial, and course design delivers that equality of attainment.

(Isaac, Senior Manager, Crawford University)

I think it takes a while for it to move from a government policy through to a change in curriculum design [...] The point is that there's been a load of work going on in different schools about how to narrow the [attainment] gap, in effect – close the gap. The effects of that kind of work are being built into course design, under the broad heading of: “We have this rule – design rule – which is your course has to demonstrably be attempting to close the gaps recognised in your population of students”.

(Elena, Lead Support Staff, Devlin University)

The new regulatory framework and its associated focus on metrics appears to have had some effect on people in the four universities in relation to their priorities, the way they think about programme objectives and to some extent the way they work together. It is much less clear that this intervention has had a significant effect on the core practices of programme design. Metrics are increasingly present and used intensively in some cases, but this influence is counterbalanced by some limiting factors, across a spectrum ranging from low confidence in working with data in some cases through to active resistance in others. However, there are also some circumstances connected to equality and widening access where regulation and metrics are widely accepted, and this appears to have had a stronger influence on design practice.

#### *6.4 – The changing status of quality assurance*

It is important to consider not only the direct impact of new policy interventions, but also the impacts of any recession of previously established policy approaches that have been displaced by them. As described above, the creation of the Office for Students and the new regulatory framework has had a displacement effect on the higher education sector's established regime for quality assurance, led by the Quality Assurance Agency. This quality assurance regime has been developing iteratively over a period of around two decades, and across that time it has become extensively embedded in the higher education system. The quality assurance approach had been developed intentionally for developing practices across a wide range of academic activities; this is in distinction from an approach focused on monitoring outcomes. In the previous chapter we saw how programme developers remained highly conversant with the conventions of the quality assurance approach, and it remained a very influential factor in their work. They frequently referred to quality issues or connected regulations drawn from QAA guidance, as well as rules and processes that were themselves linked to the wider quality assurance regime. For the programme developers in the sample, the coming of new regulation and the rise of metrics had not supplanted the older and more established quality assurance approach, driven by the QAA. Programme developers often talked about the quality assurance system as a given structure with an expectation that their programme design practice should fit into that structure. At more senior levels, there were different perspectives. At three of the four universities – Crawford, Scher and Devlin – senior managers had recently instigated significant changes to the way they followed or deployed the established quality assurance process. The fourth, Bailey University, was about to begin a review process at the time of the fieldwork that would likely touch on similar issues, but this had not yet begun.

At Devlin University, senior managers had made a decision to move away from the cyclical five-year review previously expected by the QAA. They were also beginning to unpick much of the underpinning material in the QAA's quality code and its supporting guidance with a view to extracting from it the most valuable material while dispensing with other material now seen as overly prescriptive. This framework was increasingly seen as too weighty and cumbersome, and a source of inertia against programme innovation. Rather than looking for ways to integrate the established quality regime with some new methods, they were seeking to replace the quality system altogether with the design sprint development process outlined in chapter five, entailing a change in direction so that quality would no longer be the key driver of practice but would instead be only one of many factors to be taken into account. Participants drew on the analogy to product design, in which production quality is undoubtedly a dimension of

design success but ultimately only serves the aim of fitness-for-purpose in meeting user needs. The opportunity to make this move was directly ascribed to the shifts at the policy system level that had muted the role of quality assurance.

One of the interesting things is the death of the quality code, so if you think about the prescriptions in the quality code as used to be, there was a lot in there, you know? At some point in the quinquennium, the QAA was going to come round and ask you questions about how you did that. Well, the new set up, the quality code is very much an enabling framework, and [with] the OfS, we demonstrated that we have good principles under which we do things, but we know they're never going to come and watch us again. One of the questions we put in terms of thinking about this design and sprint stage, is now that we don't have that external framework, how would we want to do it ourselves? We saw that as an enabler to say, "We want to get courses right," and as I said, we want to make sure that it meets the overall expectations. We're no longer hampered by some of that structure that was there before.

(Bernie, Senior Manager, Devlin University)

There were other drivers to reform and rationalise Devlin's quality approach, connected to its response to the more prescriptive policy interventions discussed earlier in this chapter. As the amount of provision in higher and degree apprenticeships has risen, so the process of aligning their design to multiple external points of accountability at the same time had become enormously complex. Participants described how it was necessary to ensure programmes meet the expectations of the general quality framework (e.g. subject benchmark statements, nominally scrutinised by the QAA) in addition to the requirements of the relevant apprenticeship standards (scrutinised by the Institute for Apprenticeships), and the requirements of the respective professional bodies (scrutinised by each of those bodies, as applicable). Of all of these, the general quality framework was seen as the least intense point of external scrutiny and the one where the university had most flexibility to operate with some discretion to fill a vacuum of guidance in how to reconcile these pressures:

[The external bodies'] approach to quality assurance has been pretty lacking, actually. So, in the early days of degree apprenticeships, we had very little guidance about what quality looks like. And I appreciate that's difficult because until you develop practice, it's hard to know, isn't it? So I do understand that. But there's very little guidance about quality apprenticeships. And then they formed the Quality Alliance which was the IFAtE, OfS, QAA, Ofsted, OFQUAL. So, they formed this quality alliance and put together this quality statement. I didn't think there was very much quality in the quality statement.

(Diego, Lead Support Staff, Devlin University)

At Crawford University, the moves had not been so pronounced, but similar trends could be observed. Senior managers had determined that the whole model of 'quinquennial review' was too burdensome and unwieldy to co-exist with a new metric-centred approach. There was a sense at Crawford that the quality assurance model had established an approach that was both too slow and too centralised – they had decided to retain many of the basic quality principles and the detail from most quality codes of practice, but to move away from a regimented five-year cycle. This move was intended to allow successful courses – a judgement determined largely by metric analysis – to flourish unimpeded, while also creating swifter challenge for courses that were not achieving the expected results. There was an expectation that a faster quality process would enable quicker feedback into programme design activity, alongside greater use of metrics. This further reinforces the impression of anticipatory management actions described above, foreshadowing a wider move towards data scrutiny across the sector, but also captures a growing frustration with a quality system predicated on long-term review in a market and resource environment that was already quickly becoming more dynamic and pressurised.

I just stomped my feet a bit, a few years ago, to create a new process. It was far too heavy, we were doing. It's the quality assurance framework around which we design and develop and move courses on. [...] What we did was break it down into a number of steps, and devolve the responsibility to appropriate academic units for that. [...] We changed our review process from the traditional quinquennial process that used to happen [...], to a much more data-led approach. [...] We're trying to have a risk-based approach to review. There is no point putting a great course, that's going great guns and getting great student feedback and great outcomes and good graduation rates and all those sorts of things, through a full review every five years just because that's what the system says.

(Hassan, Senior Manager, Crawford University)

At Sher University senior managers had interrupted the normal quality assurance process completely at a crucial moment to create the working time necessary for a complete review of the portfolio organised on university positioning and curriculum direction lines (as opposed to quality assurance lines). This was also a process, as discussed in the previous chapter, incorporating methods drawn from design thinking. There was an impression that this sudden one-off change of activity had led to a more lasting reappraisal of the relative value of the five-year review versus more frequent and agile development processes. Scher University had not dispensed entirely with the quinquennial review as a quality instrument, but it was clear that it no longer dominated the cycle as it had before, and attempts were being made to integrate it with some other ways of doing programme design and monitoring.

Every programme goes through a normal quinquennial QA cycle where it gets looked at and shaken significantly. Each quinquennial review cycle we would expect every programme to make significant or changes to really update. That being said, what we're finding, as one would expect with an increasingly swift moving world, is that the quinquennial review actually sometimes it's less substantive because actually we've been modifying as we go, and the modifications have been much more agile and much more iterative. [...] I stopped our quinquennial process, for six months. I said, "Stop doing it. Stop everything," and that gave me a thousand people hours roughly. A very expensive process and consequently it's caused us to go back and go, "Okay, so how do we bring these things together, so we do it differently in the future?" This has now affected our approval and design process.

(Shane, Senior Manager, Scher University)

Considering how firmly embedded the established quality assurance regime in higher education appears to be, it is striking how quickly some of the universities in the sample have moved away from it. They have done this in different ways and to different extents, and the shift was really only evident in the thinking of senior manager participants – programme developers and lead support staff remained generally adherent to the main tenets and processes of quality assurance. Nevertheless, there is evidence here of a nascent change in status of quality assurance within the English sector, apparently triggered by the adoption by several different public bodies of different policy tools, which has reduced the emphasis on established quality assurance processes by putting greater attention onto other processes – for example, metric analysis or external standards-setting. There is also some data to suggest that new programme design approaches – potentially including those shaped or informed by

design thinking – might have more opportunity to develop in a system where long-established policy frameworks are beginning to break down and becoming less influential within practice. There is, however, still a considerable role for quality assurance in the way that front-line practitioners think about their work; the programme developers in the sample still considered quality assurance to be an important matter.

### *6.5 – Summary and principal findings*

The policy environment was experienced very differently within the four universities, and its effects varied in relation to the range of policy instruments operating in the system. Some of the more prescriptive interventions could be powerful – for example, the intervention of professional bodies is quite widespread and was frequently cited as powerful by interview participants. If the scope professional bodies have to impose requirements on programme design has been expanding, the willingness of practitioners to configure their programmes accordingly has kept pace with that process (albeit some participants exhibited at least impatience with this state of affairs). By contrast, offers from central government for direct commissions and projects tied to programme innovations can ultimately be ignored or rejected without great cost or risk. Universities and those within them may experience a certain degree of external pressure to show willing in considering those initiatives, but there was little evidence that those in the management level of strategic action could really compel front-line practitioners to take them up, and it seemed clear that practitioners did not wish to go very far in creating programmes to cater for the requirements of any external commissioning agencies, especially if it was felt they might set those requirements out inflexibly. One possible factor influencing this difference might be the extent to which professional bodies may themselves be more sensitive to the values, norms and codes at work within higher education practices – there is an established and ‘normed’ way in which they can exert authority. Central government bodies with discrete pots of money to offer for specific projects may tend to pitch to universities in a way that is not readily compatible with practitioner expectations. But the implications for academic autonomy of ceding ground to professional bodies can be considerable – as we saw here in one instance only from this small selection of universities, where a practitioner developed a completely new programme design from scratch in large part to address the new requirements of a statutory professional body. The implications of taking relatively small commissions to offer a single new programme (or handful of them) under ring-fenced government initiatives are arguably much less far reaching.

Where programme design activity is subject to more prescriptive forms of policy intervention, this creates some constraints and limitations on the autonomy of practitioners and the design



options they have. Regulatory interventions offered practitioners comparatively greater discretion in ways they could adjust and adapt their practice, but this comes at the price of much greater uncertainty about what the most appropriate or advantageous changes to make might be. This was likely to have been driven in part by the recency of some of the new regulatory interventions – people were finding their way through this and had not reached conclusions about how best to navigate them. But considerable ongoing ambiguity is likely to be generated by the imprecise relationship between practice, the metrics that result from the outcomes of practice, and the stance or action that the regulator might take having reviewed them, often with a considerable time delay. Practitioners at the front line had not engaged directly with regulatory policy interventions, beyond having some background knowledge of the Teaching Excellence Framework. They had not, for example, engaged with the OfS condition B1 on ensuring good programme design. They had given some consideration to the new policy drivers into their programme design work, to a limited extent (especially around student attainment and employment outcomes), although they did not wholeheartedly welcome them in every respect. This suggests that the meso layer of management had a role in translating policy demands by promoting greater use of metrics generally and a stronger focus on areas where they knew metrics would be scrutinised, which had taken various forms (anticipatory versus reactive, overt versus subtle, or accentuated by a specific problem such as needing to improve a TEF rating). Regardless of the management approach taken, this may be regarded as strategic action aimed at cutting through ambiguities in the regulatory system. It would be wrong, however, to suggest this process had led to radical changes in practice – the effects were more marginal.

A striking issue that emerged from the analysis was around the changing role of quality assurance within universities. In the new regulatory environment, a long-established quality assurance regime has faded at the macro level of public policy. As a result of this, three of the four universities were at differing stages in similar processes aimed at making very substantial changes to the way they handle quality assurance internally, with a view to reducing the amount of resources committed to it and to open up the possibility of using new approaches and methods. This did not mean they were prepared to allow low quality programmes – they wanted to assure quality in different, lighter, and more agile ways. This is significant because as we saw in the previous chapter, the strongly institutionalised position of the quality assurance regime was an important barrier to new design thinking orientations developing. This implies that public policy intervention may in this instance be helping to release certain barriers to new practice. Although the relevant higher education reform white paper had envisaged a more ‘risk-based’ system which might relieve some bureaucratic burdens and led to the removal of the requirement for full audits on a fixed five-year cycle (BIS 2016: 32-37),

the contribution this has made to the emergence of new programme design practices was both unanticipated and unintended.

This analysis can be distilled into the following findings (numbering continues from the findings reported in chapter six):

3. Prescriptive policy interventions have mixed effects. At both the managerial and professional levels of action there is reluctance to allow new forms of sector regulation based on registration conditions and scrutiny of metrics to become an influential driver of programme design practice, so at present this kind of pressure remains in the background and has only weak effects. However, there are expectations that it may become a more important factor, and managers were preparing for that scenario to develop. Professional bodies exert more pressure on programme design practices than policies promulgated by central government or higher education centred regulation, but this is a different kind of environmental pressure rooted in the need for universities to maintain the trust of students and professional stakeholders.
4. Against a background of generally weak policy pressures, there were two points of exception. Firstly, higher and degree apprenticeships are an area of provision where universities have accepted significant levels of external influence and control from central government policy actors as a condition of accessing new markets; participating in the delivery of apprenticeships entails shifts in programme design practice, favouring much more intensive collaboration between programme developers, staff managing business relationships, and external employers. Secondly, reduction in the scope of quality assurance at the system level has had strong policy effects in relation to the specific area of programme design, in that it has positively enabled the removal of inertial factors relating to quality assurance referred to findings two and three above, and allowed new design methods to be developed. The two issues were connected to each other, because implementing apprenticeships also created complications for quality assurance processes.

## **Chapter Seven: Discussion**

### *7.1 – Chapter introduction*

This chapter seeks to connect the findings to theoretical issues raised in the literature review presented earlier in the dissertation. The prospectus of this research project was to test theories concerned with the development of design thinking approaches in novel contexts, alongside theories of policy pressure, with application to higher education. There are a vast range of possible theorisations to consider, but through a review of relevant literature the focus narrowed onto two principal accounts – Kurtmollaiev et. al. 2018 and Bleiklie, Enders and Lepori 2017, but also with reference to connected theories. These theories are not directly conversant with each other because they arise from different research domains, but both take their foundations in the study of organisations with underpinning theory of institutional logics, and they converge when considered in relation to the research questions asked here.

### *7.2 – Modelling organisational design integration*

In comparing the Kurtmollaiev et. al. (2018) model to the data and findings generated in this study, it is apparent that in some respects it performs very well in translation to a higher education context. Following Spicer and Sewell (2010), Kurtmollaiev et. al. utilise a concept of “organisational logics”, which are considered as institutional logics reflected at the organisational level (Kurtmollaiev 2018: 60); these organisational logics are not the same as underlying institutional logics, though they may relate to each other, and indeed we would expect to see a clear articulation between them. In applying their concept we can say that the dominant organisational logics observed in the universities sampled, at least in relation to programme design, were an adherence to quality assurance conventions, a tendency towards individuation (not ‘individualism’ – which might imply actors were self-centred in a psychological sense; rather, the term points to an organisational norm of working individually in many respects), and reluctance to engage in experimentation involving users (i.e. students). In all the universities, it was clear that the balance of these organisational logics had been disrupted by problem recognition. In some cases this may have been associated with the inception of certain programme design initiatives, but the effect was more general – an increasing belief that existing ways of working were not fast enough, insufficiently critical, too resource intensive, and could expose the university to greater risks in an increasingly competitive market environment. In all but one of the universities, part of the response had been to adopt some of the classic attributes and methods associated with design thinking, with a clear shift in organisational vocabularies and instrumental use of new symbols. However,

the adoption of these methods was not a matter of instant displacement and revolution – there was an ongoing deliberation and negotiation about the role of these new approaches in practice (in one university this appeared to have involved, to some extent, the entirety of the academic staff). None of the universities had transitioned into what the model refers to as “stage S4” – the recognition of design power and the creation of new design centred institutions.

These features are consistent with a reasonable application of the Kurtmollaiev et. al. model to another context. There are, however, some areas of divergence of the model from the data and findings presented here. While the Kurtmollaiev et. al. model treats the role of senior management in the process as primarily reactive, at least in the earlier logical transitions, it was apparent in the data collected here that university senior managers held the strongest beliefs that processes were too slow and cumbersome, and had a much stronger role in the inception of new design approaches and the selection of methods to be used in practice. One of the universities sampled had not progressed beyond what the model refers to as “stage S1” – despite there being some pockets of programme innovation, there was little true disruption of dominant organisational logics, and more importantly it was not clear that any amount of design thinking intervention would cause this to change. Indeed, it may well be that in this university such moves would be regarded as faddish management over-reach, causing wider organisational resistance. This is significant because the Kurtmollaiev et. al. model does not contain a variable for active resistance, only passive inertia. In higher education, there may remain a greater tendency than in many sectors for members of the organisation to ‘fight back’, at least in some institutional settings where a vestigial logic of academic freedom may be stronger. In addition, the purposes of universities are so diverse that what may be recognised as organisational logics in the learning and teaching domain may be very different from those which might be observed in other domains such as research, knowledge transfer, or community engagement.

It is important to consider the organisational positioning of design thinking agents. For this we can usefully bring in the Junginger (2009) model (external, localised, centralised, intrinsic) and the Dunne (2018) model (think tank, expert hub, independent helper, embedded facilitator). In both ‘modes’ identified in the findings, there was an underlying feature in common – support staff, located alongside academic departments but not senior in hierarchical terms, were acting as agents to progress design activities. In the ‘systematic’ mode this took the form of a repurposed and/or re-tasked academic quality unit, which then acted as a “centralised design think tank” (taking the Junginger and Dunne models respectively). In the ‘enabled’ mode, by contrast, it took the form of a newly established and specialised design unit, acting as an

“centralised independent helper, for localised design” (this time taking Dunne before Junginger). The key contrast is in the different emphasis of the agents’ role – as between a team “that works on organization-wide disruptive innovation projects” versus a team who are “primarily facilitators who work on request with operating departments to apply design approaches to specific projects” (Dunne 2018: 183-184). The reality was a little more blurred than this – there is no doubt that where the ‘enabled’ mode held sway senior managers in the university did view the activity as strategically very important, but they did not intervene in practices in the same way as they did in the ‘systematic’ mode.

This matters in relation to the Kurtmollaiev et. al. model because it will be seen that in both modes these agents were the key mobilisers of “instrumental use of new symbols” and the key practical respondents to sources of “action inertia”, in practice. In so doing, they in large part managed the interaction of novel design initiatives and established practices, negotiating the complex balance between practice displacement, accommodation, or synthesis. Without such agents, in this kind of organisational positioning, it is hard to see how design thinking might have progressed even to what Kurtmollaiev et. al. label “stage S3”. It is these actors whom we might consider to be doing the bulk of the “institutional work” (Kurtmollaiev et. al. 2018; Lawrence & Suddaby 2006). It is of significant importance that in both ‘modes’, these agents enacted a diminishing emphasis on quality assurance as a structuring institution: in the ‘systematic’ mode, academic quality professionals were asked to concentrate on design (with reform of, and some reconciliation with, quality practice), and in the ‘enabled’ mode the design support professionals had little background in, or affiliation to, quality assurance. This can be related to an application of the institutional work concept to higher education quality advanced by Elken and Stensaker (2018), who introduce the concept of “quality work” as a device to refocus attention onto agents and actors who shape quality assurance within an institutional context.

The Kurtmollaiev et. al. model could be a useful theory for understanding institutional change in higher education settings, where design thinking is involved, but it may need to be revised to take consideration of some of the contextual variations outlined here. Thus, it partly satisfies a theory-test in application to another context, and it represents an improvement on modelling the programme design process normatively as a sequence of established practices, even if underpinned with analysis of institutional factors such as beliefs, values, and ideologies (c.f. Toohey 1999). An additional problem for the Kurtmollaiev et. al. model is that it positions the policy environment as a background factor, with its only point input into the chain of organisational logic change at the start, and not while it is in process. While they say that government actions, principally market deregulation, had a role in the initial erosion of

institutional logics, and that the external market environment has an ongoing influence, tightly focused policy pressures that may intercede as the process evolves are not modelled. This may be accounted for by recognising that Kurtmollaiev et. al. had analysed a case in a private sector company and not a public or voluntary sector organisation, and such pressures were not evident their data. However, this factor may limit the generalisability of the model across all organisation types; authors such as Bason (2017) and Junginger & Sangiorgi (2017) have advocated analysis that examines the inter-relation of design, management, and policy pressures as continuously interpolated. Certainly, this seems like an essential matter to consider in relation to higher education.

### *7.3 – Modelling policy effects*

Introducing a third field of strategic action at the macro level of the policy environment allows for additional theoretical insights. For Bleiklie, Enders & Lepori 2017, the underlying configuration of institutional logics in higher education is transforming, with conspicuous effects:

“The higher education field is thus experiencing increasing institutional complexity with the rise of a new logic (‘the market’) that overlaps with a re-formulation of the old bureaucratic logic towards organizational autonomy and accountability (‘the audit’). At the same time, beliefs and practices inscribed in the professional logic, such as peer competition and peer review, are mobilized in the instrumentation of the market-audit logics in higher education.”

(Bleiklie, Enders & Lepori 2017: 319)

These authors, along with Seeber et. al. (2015), write of a newly emerging constitution of the university in which managerial and professional logics are increasingly blended. They argue that fruitful analysis of universities as organisations should investigate the features and parameters of this possible blending, to move beyond attempts to define them in terms of organisational categories, and to better understand how the institutional logics that reside in them may vary situationally depending on differing organisational characteristics. In this vein, Shields and Watermeyer (2020) conduct a cross-sectional survey of academics in UK universities to understand differential patterns of institutional logics, finding that autonomous, utilitarian, and managerial logics coexist in universities, but the extent of blending between them varies with university characteristics, with stronger affinity to autonomous logics observable in universities with high research intensity and lower proportions of students from state schools, producing a ‘less blended’ rationality. They suggest that “the notion of autonomy

is largely incompatible with a utilitarian or managerial view of universities” (p.13), an apparent challenge to ‘blended’ accounts of the university. In relation specifically to the influence of policy pressures, it is important to consider how blended institutional logics, if they arise, may condition the interaction between policy and practice. It will also be of benefit to reflect on the earlier view of Kogan et. al. that the impact of policy interventions is conditioned by “the extent to which the changes are welcomed by, relevant to, moulded and absorbed by academic institutions and practices” (Kogan et. al. 2006: 175).

In the universities sampled here, the degree of alignment between policy pressures and market opportunities appears to be very important in shaping institutional responses. For example, where government offers direct funding for higher education programmes in a system with strong market forces, universities will look for signals that any additional effort and investment required in programme innovation is likely to bring success in market terms as much as success in winning funding bids or pleasing government actors, and perhaps more so; the data included several cases where this alignment was not convincing, so initiatives did not proceed. But when a statutory body changed its rules for professional examinations, one university went to strenuous lengths to cater for that policy change because it was also seen as a strong market opportunity. It may be that if the requirements imposed by professional bodies continue to restrict programme innovation, universities may increasingly use more innovative approaches in areas that are not professionally accredited, leading to a divergence of outcomes in relation to programme design. In terms of regulation of higher education as a whole sector and market, there were equivalent factors in policy-market coordination. Regulatory agencies had conceived and implemented policies for greater scrutiny of key metrics, but those policies may draw more potency from the way they interact with market conditions, for instance by informing applicant perceptions. In the data it was apparent that those with TEF Bronze awards felt they were in a weakened market position as a result of the policy, and those with TEF Gold awards felt they were in a stronger position, though their position could be weakened by an extension of the TEF to subject level. Hence the centrality of addressing student employment outcomes was widely evident and can be seen simultaneously as a response to policy pressure emanating from the Office for Students and as a cornerstone of university marketing strategies. However, even in these instances the practice changes observed were moderate, with actors at all levels reluctant to mould their practice around regulation or metrics, or to absorb them in a manner that made them more than a background factor. Their influence was also confined to ends (what programmes should achieve), as opposed to means (how programme design work is carried out) – in other words, there was some evidence of policy exerting moderate influence on what programmes to offer,

and the content of programmes, but little evidence for significant policy influence on how programme design work *is practised*.

There were two areas in which this coordination dynamic appeared to produce stronger policy effects. Firstly, higher and degree apprenticeships are an intriguing phenomenon which represent, at the same time, a new market that universities can access *and* a heavily prescribed policy intervention emanating from central government. While universities can choose not to be involved in the provision of these apprenticeships, it is clear from student number growth that the incentives to do so are strong. Where they are taken up, they lead to significant changes in practice, with new programme design mechanisms put in place to enable them, entailing new methods and techniques, and requiring deep collaboration with business relationship staff and external employers in the design process. These are presently quite self-contained with a focus on the new provision as operationally separate from existing provision in more traditional modes, but there were indications that the boundaries between the different activities were beginning to blur, and there were signs that aspects of the apprenticeship programme design approach were being considered for other areas of provision, which would require major shifts in academic professional conventions. Secondly, in relation to quality assurance, the analysis suggests that recent changes in the policy environment, specifically the combination of legislative change with decisions made by a new regulator, had provoked changes in universities' internal quality assurance processes, and this in turn had the effect of clearing the way for new design practices to be adopted. Those new practices were seen, at least by senior managers, as an important way to increase programme development agility and speed to strengthen their capability to respond to ever-shifting market pressures – whether they be risks or opportunities.

The findings of this research tend to suggest that there is some blending of logics in the practice of programme design, manifested in the ongoing negotiation of design processes between senior managers and programme developers. Support staff in relevant areas had an important role as agents in marshalling the development of new practices. Such effects could also be recognised in situations where, for example, the universities with the strongest and most centralised managerial authority in general terms had maintained an arms-length approach to pursuing design practice changes – in one case, cleaving to a 'enabled' rather than a 'systematic' model. This should be considered, however, remembering that the universities sampled were not research intensive, and had high proportions of students from state schools, so any blending effects evident are not necessarily at odds with Shields and Watermeyer (2020) – rather they may suggest that the notion of blending advanced by Bleiklie, Enders and Lepori (2017) and Seeber et. al. (2015) may be more appropriate to mixed



economy universities bearing a larger role in national policies concerned with skills, widening participation and applied research activity, at least in terms of the English system. The key issue of policy effects is somewhat more complicated. In a test of the position maintained by Bleiklie, Enders and Lepori (2017) that policy effects tend to be weak, the findings suggest that this principle largely applies even in circumstances where the policy environment was strongly oriented towards reform of learning and teaching practices. However, where policy and market pressures become coordinated, there may be greater effects. In particular, there are clear indications that if specific policies have the effect of disrupting the policy foundations for strongly instituted practices within universities, such as adherence to quality assurance and individuation, then practices may be more strongly influenced by policy pressures.

#### *7.4 – Changing relations between logics: the issue of quality*

It will be useful to develop a little further the discussion in relation to quality assurance specifically, as there are some additional complexities to consider. This is a huge subfield in itself, and there is insufficient space here to delve into the quality debate in great depth; in addition, the data collected here was not focused on quality issues and so would not support an attempt to do so. However, it is worth considering several tightly focused points with the aim of surfacing some complex issues as opposed to drawing new conclusions. Quality assurance regimes have long been argued to have a strong role in diminishing professional autonomy and the rise of managerial logics (e.g. Barnett 2003, Morley 2003, Jarvis 2014). The critique of such audit mechanisms is that they undermine professional logics and values, and this applies even where they are administered by bodies which are ‘sector owned’ as opposed to ‘state controlled’ (like the QAA in the English system). While ensuring that programmes are imbued with quality is clearly a fundamental part of academic professionalism, a distinction can be drawn between this innate value versus policy and management processes put in place to classify and audit quality. Barnett argues that while quality assurance can have both pernicious and virtuous dimensions, it is at greater risk of becoming more pernicious the more it is aligned to market logics and related managerial practices (Barnett 2003: 91-102). Jarvis says that an underlying market logic stands behind a more proximate managerial logic governing quality assurance regimes, with a significant role in driving programme innovation: “The often enthusiastic adoption of QA regimes by universities highlights a logical response to cascading market rationality, where higher education providers seek not only to assuage consumers of the ‘value-for-money’ in the degree products they offer but increasingly to protect reputations, market share, positioning and product differentiation” (Jarvis 2014: 163). A corollary of this is that institutional logics that are recognisably different, such as utilitarian

and managerial logics (Shields & Watermeyer 2020) may be mutually reinforcing, vis-à-vis their relation to professional or autonomous logics.

The findings of this study problematise this view in a specific way. As discussed earlier, it was apparent from the findings that adherence to the quality assurance regime was a key part of a dominant organisational logic in the universities sampled. Front line programme developers regarded it as an important aspect of their professionalism, with knowledge and understanding of its many protocols a key element of how they successfully do their work; this was thoroughly internalised. This does not mean that quality assurance, as a set of mechanisms, is underpinned by an institutional logic of professionalism. Rather, it may be that the institutional logic of managerialism has advanced so far that quality assurance, once regarded as a serious challenge to professional values, is now an entirely routine and taken-for-granted aspect of professionalism as enacted in practice. This could also be read as a further example of how Bleiklie, Enders and Lepori see a blending of logics, including situations where professional logics co-opted in the service of “market-audit” logics (2017: 319) – indeed, the quality assurance model operating in England remains underpinned by peer review. It may also be that new and more potent symbols of marketisation – the TEF, for instance – have made established quality assurance seem to many as only a moderate imposition. However, the findings here suggest that the instituted quality assurance regime has become an obstruction to new programme innovation, both in terms of doing things differently, and in terms of doing them more quickly, and hence a barrier to market repositioning and competitiveness. Programme developers found it cumbersome and onerous, senior managers wanted to remove as much of it as possible, and support staff in relevant central service units were re-tasked to change it. This raises the prospect that if quality assurance was once working at the service of a rising market logic in higher education, it may not now be serving it so well.

The notion that quality control functions inside organisations might act to impede innovation efforts is not new (Prajogo & Sohal 2001). In higher education specifically, it has been argued in reference to systems in the United States that programme innovation is crucial for universities in an increasingly competitive market, but this may be stymied by quality assurance bodies and processes (Horn & Dunagan 2018), although the higher education system prevailing in the United States has always possessed a higher level of market coordination and instituted market logics than have European systems, including those in the UK, and this function operates at the individual state level not the federal level and is not uniform. However, it seems not to have been greatly acknowledged that, in the European (or for that matter, English) context, certain specific managerial functions might at times also act as constraints on market logics, rather than becoming conflated with them (Barnett 2003;

Molesworth et. al. 2011), or possibly “cascaded” from them (Jarvis 2014). Adding to the analysis of Elken and Stensaker (2018), we might venture to say that if market logics further grow in importance in higher education systems, “quality work” might tend increasingly to include institutional work with the intention of actively reducing the role of quality assurance, or at least changing its status so that is explicitly a subsidiary of another function such as ‘innovation’. In other words, quality assurance can undergo a reversal in its logical position – from an enabler to an inhibitor of market logics.

### 7.5 – Summary

Theoretical models proposed for understanding the integration of novel design thinking in organisations (Kurtmollaiev et. al. 2018) and for understanding the influence of policy pressure on organisations (Bleiklie, Enders & Lepori 2017) have been reconsidered here in relation to a case study of a national higher education system. The context of the case study meant that there was a *prima facie* expectation that the Kurtmollaiev et. al. 2018 model would be a reasonably good fit for the case, and conversely a *prima facie* expectation that the Bleiklie, Enders and Lepori 2017 model would be challenged by the case. In the eventuality, both theories were largely a good fit for the case, and so both theories tend to be supported by the findings of the study. However, at a point of convergence between the two theories, the case exposed gaps in each of them, which are connected. The Bleiklie, Enders and Lepori model should allow for stronger policy effects where specific interventions may remove the policy foundations for deeply instituted practices, and the Kurtmollaiev et. al. model should allow for policy interventions to shape the development of design thinking in organisations on an ongoing basis, not only as an instantiating factor. In addition, although these theory tests have value on their own terms, it is of more value that they have allowed an apparent shift in the institutional position of quality assurance to be surfaced, with significant implications for policy and practice relating to higher education programme design.

## Chapter Eight: Conclusions

### 8.1 – Chapter introduction

This chapter concludes the dissertation, with a summary statement of the key findings, a short reflective discussion highlighting some gaps in the analysis and indications for future research, and finally a discussion of possible future scenarios and ideas for the role of design thinking in higher education.

### 8.2 – Statement of findings

1. Design thinking has developed in the universities investigated in two distinct ways:
  - i One mode of development can be described as ‘systematic’ – in this mode, senior managers have mobilised design thinking as a concept, using it to instigate broad change in programme development and approval processes across the university, with aims to increase the speed and efficiency of those processes, and centralise a focus on ‘the student journey’. In doing this, managers have required of professionals the adoption of versions of some of the classic attributes, tools and methods associated with design thinking.
  - ii Another mode of development can be described as ‘enabled’ – in this mode, design thinking has been chosen by professionals as a way of responding to programme development challenges, adopting for themselves some of the classic attributes, tools and methods associated with design thinking; senior managers have not instigated this or sought to expand it, but have supported it by taking an open view on pedagogic approaches, backed with resource allocation and structural change.
2. In both ‘modes’ these developments have modified established practice but not displaced all aspects of established practice. There were significant inertial factors weighing against the development of design thinking attributes, methods, and tools in practice, which were underpinned by certain instituted structures and norms. The main inertial factors observed were the strongly institutionalised position of the existing quality assurance system, barriers to collaboration / tendency towards individuation, and some reluctance to engage in prototypical or experimental work with students. In both ‘modes’ managers were attempting to challenge these inertial factors through certain kinds of action, for instance by removing or reducing an emphasis on quality assurance as well as routines and

bureaucratic activity associated with quality assurance, or by setting up new kinds of pedagogical support functions in central, non-academic departments.

3. Prescriptive policy interventions have mixed effects. At both the managerial and professional levels of action there is reluctance to allow new forms of sector regulation based on registration conditions and scrutiny of metrics to become an influential driver of programme design practice, so at present this kind of pressure remains in the background and has only weak effects. However, there are expectations that it may become a more important factor, and managers were preparing for that scenario to develop. Professional bodies exert more pressure on programme design practices than policies promulgated by central government or higher education centred regulation, but this is a different kind of environmental pressure rooted in the need for universities to maintain the trust of students and professional stakeholders.
4. Against a background of generally weak policy pressures, there were two points of exception. Firstly, higher and degree apprenticeships are an area of provision where universities have accepted significant levels of external influence and control from central government policy actors as a condition of accessing new markets; participating in the delivery of apprenticeships entails shifts in programme design practice, favouring much more intensive collaboration between programme developers, staff managing business relationships, and external employers. Secondly, reduction in the scope of quality assurance at the system level has had strong policy effects in relation to the specific area of programme design, in that it has positively enabled the removal of inertial factors relating to quality assurance referred to findings two and three above, and allowed new design methods to be developed. The two issues were connected to each other, because implementing apprenticeships also created complications for quality assurance processes.

Taking these findings together, and through additional theoretical discussion, there are some overall conclusions of significance to report. Theories concerning the integration of design thinking in organisations, and policy influences on this, perform well but can usefully be updated. The development of design thinking approaches has been driven by greater imperatives for faster and leaner processes for programme innovation, and has been enabled by policy change – specifically, a change in the status and mechanisms of quality assurance. In higher education systems with stronger market co-ordination, innovation and quality assurance functions may be in tension. Design thinking may offer new ways to innovate, but managers and professionals should consider carefully what approaches they adopt, as this will have important implications for its integration with established practice.

### *8.3 – Reflections on the analysis and potential future research*

There are some issues specific to higher education that represent gaps in the analysis reported here and would warrant further investigation. The issue of difference between subject areas is likely to be very important. While the interview participants at the programme developer level represented a range of subject areas, when it came to analysis the data did not allow for rigorous comparison along disciplinary lines, beyond observing that governments had made greater attempts to influence programme design in STEM areas (albeit this did not appear to have resulted in much influence), and that professional bodies operate differently in regard to different subject areas and in some subjects are not relevant at all (though where they are involved, they do often have a substantial influence). In addition, universities have different subject mixes and may have a distinctive subject focus, which is likely to have a differentiating effect on how they integrate new design practices. The problem of handling cross-disciplinary issues in this area of research has been acknowledged, with Bleiklie, Lepori and Enders saying: “different organizational sub-units may find heterodox ways of dealing with institutional complexity and organizational archetypes... further work is needed to dig deeper into disciplinary fragmentations as sources of inter-organizational variations and intra-organizational variation” (2017: 322). This seems to be a very appropriate way forward.

Another area where the data suggested an issue was around the capacity of staff to engage in programme development work, in terms of working time. Several programme developers indicated that new programme development is a highly intensive process, and they had been expected to carry it out without sufficient remission of working time, or proper recognition after the process had been completed. If novel design thinking approaches are to be contemplated, it will be important to find out what the impacts on staff might be in this regard and to consider how developing expertise in programme design might be better recognised. It might also be that more consideration could be given to how people might develop careers as programme design specialists in universities, supporting other colleagues with programme design work, with a role in promoting and developing novel design approaches. When participants addressed the concept of specialism in design practice, they generally felt this should be blended with other professional roles, although it seemed this was a matter of some debate inside universities. It may be that further research could help move this dilemma forward.

It is hoped that the study demonstrates the utility of considering design thinking in terms of organisational institutions and design-as-practice (Kimbell 2011; 2012). This orientation allows design thinking to be understood contextually and especially for investigating it in relation to

novel contexts. Universities appear to be a very good example of practice situations where design thinking can develop that is specific to, and authentic in, its own context. This design thinking does not take the same modality in every university, as compared, broadly speaking, to established fields of design practice (e.g. fashion, graphics, etc.). Indeed, there is no reason to think it would. However, when we bring in Kimbell's complementary concept of "designs-in-practice", this exposes complexities in higher education settings which would be a worthwhile area for further research. Just as there are already-instituted practices amongst professionals and managers, there are also already-instituted practices in how 'student users' engage with their programmes – the challenges of student choice and optionality, which can limit design coherence to some extent, and a lack of integration with the wider range of ancillary supportive services that students may or may not engage with. Students as users are also highly diverse and their engagement with educational programmes 'as designed' will be inevitably be shaped and conditioned by their own backgrounds, characteristics, and minds, in a way that surely goes beyond design reception for most products and services. There was widespread recognition of these issues amongst the interview participants, and a clear sense of commitment to address them. Designers in many fields will be familiar with problems associated with users not engaging with their designs as they were intended to, but this 'practice gap' may be distinctly wide in higher education, and difficult to bridge.

Addressing the problem of the 'practice gap' may be central to resolving another limitation of this research, albeit one that was known at the outset. It was clear this project would investigate the development of programme design approaches, and influences on them, but investigation of the performance of those approaches – whether they generate improvements in learning, for example – would be out of scope. To achieve a more complete picture, this would at some stage need to be undertaken, as envisaged by Hassi and Laakso (2011). It raises a variety of questions about how we might judge or measure improvement in programme design outcomes, and about whether the original design of programmes, or what might be thought of as their 'blueprint', corresponds in practice to what is experienced by students actually on those programmes. As one interview participant put it:

We may need to revisit our course design more frequently. [...] Are we true to it? Because I think what will often happen is we might have veered one or two points away from it, without realising, and therefore if a course is successful or unsuccessful, we're still thinking that's against the design that we originally had.

(Janice, Lead Support Staff, Crawford University)

Still, it would be a worthwhile exercise to establish parameters and methods for understanding design performance, and perhaps an essential one if its advocates are to answer critics of design thinking who claim it is a management fad that may make outcomes worse, some of whom are vociferous. It may also help this cause if universities ensure any development of design thinking remains in the realms of emergent practice and academic research, and to avoid commissioning costly consultants to drive it forward, a phenomenon which is a significant part of the critical position. Such action might tend to bring in prefabricated design models that are insensitive to context. None of the universities in this study had 'imported' design thinking in this way; they were working out what the idea and its attendant tools and methods might offer in their own circumstances, which seems a reasonable and perhaps ultimately more rewarding approach to take.

#### *8.4 – A future for design thinking in higher education?*

If design thinking was seen to offer value for improving practice, especially if this could be validated through research, it may have the potential to make an important contribution to learning and teaching in higher education as it enters an even more turbulent period. At the time of writing this conclusion, the world has been gripped by a pandemic disease, which has led to emergency changes in the delivery of most higher education programmes, with significant implications for students and staff alike. This challenge is of such a scale that it cannot really be addressed here, yet it makes sense to acknowledge that it is set to provoke and accelerate moves toward forms of online and blended learning across a wide range of universities. This will require extensive redesign of existing programmes, much of which will occur in highly suboptimal conditions, and by necessity very swiftly. It seems a reasonable speculation to imagine that once the crisis has passed there will be a need for some form of reappraisal of programme design, asking which elements of the considerable programme and process innovation now occurring should be retained, which should revert to previous states, and what should be remade again. It is also not unlikely that many universities may review their course portfolio, in view of rapidly reshaped market trends.

In this scenario, the data and findings from this study suggest some insights for what may happen next. University senior managers finding themselves in a position where they wish to rapidly review either a large portion of their course portfolio, or induce significant changes in the way student journeys are organised, may turn to an approach resembling what has been termed here the 'systematic mode'. They may or may not call this 'design thinking', but they are likely to utilise some of the same classic attributes and techniques. The findings do not extend as far as to indicate what might make this successful, but it may be said that this



probably depends on successful integration – any new methods cannot just be ‘bolted on’, there must be clarity as to which existing processes they might replace, which they might make unnecessary, and which really ought to be kept. Perhaps one of the most substantial shifts we might expect to see relates to the perennial question of quality assurance. Having already been restricted somewhat in scope, it seems likely that the established quality assurance regime will seem to be unequal to the realities of protecting student interests in circumstances of great turbulence. This may lead to new policy intervention by the higher education regulator, or by central government, with a view towards making it easier for students to assert rights to get the programme they were promised. Any policy changes should be carefully evaluated considering both intended and unintended consequences. Making a performance requirement on universities too hard-edged might only have the effect of making higher education programmes less ambitious, which is not in anyone’s best interests.

Regrettably, the ‘enabled mode’ seems harder to accomplish in an even more constrained environment, as it is likely to take more time and be more resource intensive – still, it may emerge organically in some quarters. Government could also have a role to play here. It is possible to envisage a way in which ‘commissioning’ policy tools could be used to promote design thinking. In other sectors it would not be unusual for governments to run design competitions, or to sponsor design initiatives, searching for the best new ideas in how to shape and deliver public investments and public services. There are higher education sector bodies responsible for learning and teaching development which could host such projects, perhaps working with established designers from other fields. While this could never be a panacea – English higher education is much too diverse and there are many institutions that would find this too radical a challenge to the existing culture – it might have the potential to move things forward in some settings where practitioners are searching for new approaches and innovative solutions to address the considerable challenges that lie ahead of them. As one participant put it, reflecting on the role of government:

Think about the last bit of money that came out in relation to learning, and skills, and the industrial strategy. [...] It wasn’t a huge amount of money. Say if you were doing that in a really good way. Actually commissioning programme design in a different way would be a wonderful thing to do to, kind of, prove the concept, prove what could be done.

(Nancy, Senior Manager, Bailey University)

Finally, to conclude on a slightly more philosophical note, it may be that research into universities as organisations is caught up in debates about things we are quite used to looking at, such that we miss other things that we are not looking for. In all the foregoing discussion of the many 'logics' that flow through higher education – 'professional', 'bureaucratic', 'managerial', 'utilitarian', there may also be a 'creative' logic somewhere, which struggles for attention as other logics dominate the analysis. The notion "artistic or aesthetic" logics has been acknowledged in connection with other domains of inquiry (Scott 2014: 198), and similar notions have been offered on occasion in relation to universities (Marginson 2008; MacLaren 2012). If one future role for design thinking in universities might be to help them build their spirit of creativity in learning and teaching, that would be a development worth celebrating.

## References

- 6, P. & Bellamy, C. (2012) *Principles of Methodology: Research Design in Social Science*, London: Sage
- Andrews, J. & Eade, E. (2013) 'Listening to Students: Customer Journey Mapping at Birmingham City University Library and Learning Resources', *New Review of Academic Librarianship*, 19(2): 161-177
- Ashwin, P., Boud, D., Coate, K., Hallett, F., Keane, E., Krause, K-L., Leibowitz, B., MacLaren, I., McArthur, J., McClure, V. & Tooher, M. (2015) *Reflective Teaching in Higher Education*, London: Bloomsbury
- Badke-Schaub, P.G., Roozenburg, N.F.M. & Cardoso, C. (2010) 'Design thinking: a paradigm on its way from dilution to meaninglessness?' in: K. Dorst, S. Stewart, I. Staudinger, B. Paton & A. Dong (Eds.), *Proceedings of the 8th Design Thinking Research Symposium (DTRS8)*, 39-49
- Baranova, P., Morrison, S. & Mutton J. (2011) 'Enhancing the student experience through service design', in *Perspectives: Policy and Practice in Higher Education*, 15(4): 122-128
- Barber, M., Donnelly, K., Rizvi, S. (2013) *An Avalanche is Coming: Higher Education and the revolution ahead*, London: IPPR
- Barber, M. (2015) *How to Run a Government so that Citizens Benefit and Taxpayers Don't Go Crazy*, London, Penguin
- Barnett, R. (1997) *Higher Education: A Critical Business*, Buckingham: SRHE/OUP
- Barnett, R. (2003) *Living with Ideology in the University*, Buckingham: SRHE/OUP
- Bason, C. (2010) *Leading public sector innovation: Co-creating for a better society*, Bristol: Policy Press
- Bason, C. (2017) *Leading Public Design: Shaping the Next Governance Model*, Bristol: Policy Press
- Bastedo, M.N. (2009) 'Convergent Institutional Logics in Public Higher Education: State Policymaking and Governing Board Activism', *The Review of Higher Education*, 32(2): 209-234
- BEIS (2017) *Industrial Strategy: building a Britain fit for the future*, London: HMSO
- Binns, C. (2017a) 'Under pressure: an exploration of the module design experiences of academic staff employed in one UK university', *Journal of Further and Higher Education*, 41(6): 817-830
- Binns, C. (2017b) *Module Design in a Changing Era of Higher Education: academic Identity, Cognitive Dissonance and Institutional Barriers*, Basingstoke: Palgrave Macmillan
- Birnbaum (2001) *Management Fads in Higher Education: Where They Come From, What They Do, Why They Fail*, San Francisco: Jossey Bass
- BIS (2015) *Fulfilling our Potential: Teaching Excellence, Social Mobility and Student Choice*, London: HMSO
- BIS (2016) *Success as a Knowledge Economy: Teaching Excellence, Social Mobility and Student Choice*, London: HMSO
- Bleiklie, I. (1998) 'Justifying the Evaluative State: New Public Management Ideals in Higher Education', *Journal of Public Affairs Education* 4(2): 87-100
- Bleiklie, I. (2002) 'Explaining Change in Higher Education Policy', in P. Trowler (ed.) *Higher Education Policy and Institutional Change*, Buckingham, SHRE

- Bleiklie, I., Enders, J. & Lepori, B. (2017) 'Organizational Configurations of Modern Universities, Institutional Logics and Public Policies - Towards an Integrative Framework', in I. Bleiklie, J. Enders & B. Lepori (eds.) *Managing Universities: Policy and Organizational Change from a Western European Perspective*, Cham: Palgrave Macmillan
- Boddington, A. (2012) 'Designing Education and Reshaping Learning', in A. Boddington & J. Boys (eds.) *Re-Shaping Learning: A Critical Reader*, Rotterdam: Sense Publishers
- Booyesen, S. (2016) *Fees Must Fall: Decolonisation, Higher Education and Governance in South Africa*, Johannesburg: Wits University Press
- Brennan, J., Broek, S., Durazzi, N., Kamphuis, B., Ranga, M. and Ryan, S. (2014) *Study on innovation in higher education: final report*, Publications Office of the European Union: Luxembourg
- Broucker B., & De Wit K. (2015) 'New Public Management in Higher Education' in Huisman J., de Boer H., Dill D.D., Souto-Otero M. (eds.) *The Palgrave International Handbook of Higher Education Policy and Governance* London: Palgrave Macmillan
- Brown, T. (2008) 'Design Thinking', *Harvard Business Review* 86(6): 84-92
- Buchanan, R. (1992) 'Wicked Problems in Design Thinking', *Design Issues* 8(2): 5-21
- Buchanan, R. (2016) 'Design on New Ground: The turn to action, services, and management' in S. Junginger & Faust, J. (eds.) *Designing Business and Management*, London: Bloomsbury
- Butcher, C., Davies, C. & Highton, M. (2006) *Designing Learning: From Module Outline to Effective Teaching*, Abingdon: Routledge
- Cai, Y. & Mehari, Y. (2015) 'The use of institutional theory in higher education research', in: J. Huisman & M. Tight (eds.) *Theory and method in higher education research* Bingley: Emerald Group Publishing Limited
- Cerych, L. & Sabatier, P. (1986) *Great Expectations and Mixed Performance: The Implementation of Higher Education Reforms in Europe*, Paris: EIESP
- Christensen, C.M. & Eyring, H.J. (2011) *The Innovative University: Changing the DNA of Higher Education from the Inside Out*, San Francisco: Jossey Bass
- Clark, B.R. (1983) *The Higher Education System: Academic Organisation in Cross-National Perspective*, Berkeley: University of California Press
- Clark, B.R. (2004) 'Delineating the Character of the Entrepreneurial University', *Higher Education Policy* 17(2004): 355-370
- Collini, S. (2017) *Speaking of Universities*, London: Verso
- Colquitt, J.A. & Zapata-Phelan, C.P. (2007) 'Trends in Theory Building and Theory Testing: A Five Decade Study of the Academy of Management Journal', *Academy of Management Journal* 50(6): 1281-1303
- Conservative Party (2015) *Strong Leadership; A Clear Economic Plan; A Brighter, More Secure Future*, London: Conservative Party
- Cooper, R., Junginger, S. & Lockwood, T. (2009) 'Design Thinking and Design Management: A Research and Practice Perspective', *Design Management Institute Review*, 20(2): 46-55
- Cross, N. (2011) *Design Thinking*, Oxford: Berg

- Crow, M.M. & Dabars, W.B. (2015) *Designing the New American University*, Baltimore: Johns Hopkins Press
- Cunningham, L., Lester, S. & O'Reilly, D. (eds.) (1998) *Developing the Capable Practitioner: Professional Capability Through Higher Education*, Abingdon: Routledge
- Desrosier, J. (2011) 'Rapid Prototyping Reconsidered', *The Journal of Continuing Higher Education*, 59(3): 135-145
- Dunne, D. (2018) *Design Thinking at Work: How Innovative Organizations are Embracing Design*, Toronto: University of Toronto Press
- Eckstein, H. (1975) 'Case Studies and Theory in Political Science, in Greenstein, F. & Polsby, N. (eds.) *Handbook of Political Science, Vol. 7*, Reading, Mass.: Addison-Wesley
- Elken, M. & Stensaker, B. (2018) 'Conceptualising 'quality work' in higher education', *Quality in Higher Education*, 24(3):189-202
- Eisenhardt, K.M. (1989) 'Building Theories from Case Study Research', *Academy of Management Review*, 14(4): 532-550
- Feraboli, O. & Morelli, C.J. (Eds.) (2018) *Post-Crash Economics: Plurality and Heterodox Ideas in Teaching and Research*, Basingstoke: Palgrave Macmillan
- Fligstein, N. & McAdam, D. (2011) 'Toward a General Theory of Strategic Action Fields', *Sociological Theory*, 29, p. 1-26
- Fuller, S. (2016) *The Academic Caesar*, London: Sage
- Fung, D. (2017) *A Connected Curriculum for Higher Education*, London: UCL Press
- Gardner, L. (2017) 'Can Design Thinking Redesign Higher Ed?', *Chronicle of Higher Education*, September 2017, Washington, D.C.
- George, A.L. & Bennett, A. (2005) *Case Studies and Theory Development in the Social Sciences*, Cambridge Mass.: Harvard Press
- Gorb, P. & Dumas, A. (1987) 'Silent Design', *Design Studies* 8(3): 150-156
- Gornitzka, A., Kyvik, S. & Stensaker, B. (2007) 'Implementation Analysis in Higher Education', in Gornitzka, A. / Kogan, M. / Amaral, A. (eds.) (2007) *Reform and Change in Higher Education: Analysing Policy Implementation*, Dordrecht: Springer
- Hannan, A. & Silver, H. (2000) *Innovating in Higher Education: Teaching, Learning and Institutional Cultures*, Buckingham: SRHE/OUP
- Hassi, L. & Laakso, M. (2011) 'Conceptions of Design Thinking in the Design and Management Discourses: Open Questions and Possible Directions for Research', in N.F.M. Roozenburg, L.L. Chen & P.J. Stappers (eds.) *Proceedings of IASDR2011*, Delft, the Netherlands
- HESA (2011) *What is a Course?* Cheltenham: Higher Education Statistics Agency Ltd.
- Heskett, J. (2002) *Design: A Very Short Introduction*, Oxford: OUP
- Heskett, J. (2017) *Design and the Creation of Value*, London: Bloomsbury
- Hobday, M., Boddington, A. & Grantham, A. (2011) 'An Innovation Perspective on Design, Part 1', *Design Issues* 28(1): 5-15
- Hood, C. (1986) *Tools of Government*, Chatham House

- Horn, M.B. & Dunagan, A. (2018) 'Innovation and Quality Assurance in Higher Education' in: S.D. Phillips & K. Kinser (eds.) *Accreditation on the Edge: Challenging Quality Assurance in Higher Education*, Baltimore: Johns Hopkins University Press
- Howlett, M. (1991) 'Policy instruments, policy styles and policy implementation: National Approaches to Theories of Instrument Choice', *Policy Studies Journal*, 19(2): 1-21
- Howlett, M., Ramesh, M. & Perl, A. (2009) *Studying Public Policy: Policy Cycles and Policy Subsystems*, Oxford: OUP
- Iacono, J.C., Brown, A. & Holtham, C. (2011) 'The use of the Case Study Method in Theory Testing: The Example of Steel eMarketplaces', *The Electronic Journal of Business Research Methods*, 9(1): 57-65
- Jarvis D.S.L. (2014) 'Regulating higher education: Quality assurance and neo-liberal managerialism in higher education—A critical introduction', *Policy and Society*, 33(3): 155-166
- Johnston, W.J., Leach, M.P. & Liu, A.H. (1999) 'Theory Testing Using Case Studies in Business-to-Business Research', *Industrial Marketing Management*, 28, p.201-213
- Junginger, S. (2009) 'Design in the Organization: Parts and Wholes', *Research Design Journal* 2(9): 23-29
- Junginger, S. & Sangiorgi, D. (2009) 'Service Design and Organizational Change: Bridging the Gap Between Rigour and Relevance', in *Proceedings of IASDR2009*, Seoul, Korea
- Junginger, S. & Sangiorgi, D. (2017) 'Public Policy and Public Management: Contextualising Service Design in the Public Sector', in R. Cooper, S. Junginger & T. Lockwood (eds.) *The Handbook of Design Management*, London: Bloomsbury
- Kennedy, G.A. (2013) *Quintilian: A Roman Educator and His Quest for the Perfect Orator*, Sophron Press
- Kimbell, L. (2011) 'Rethinking Design Thinking: Part I', *Design and Culture* 3(3): 285-306
- Kimbell, L. (2012) 'Rethinking Design Thinking: Part II', *Design and Culture* 4(2): 129-148
- King, G., Keohane, R.O. & Verba, S. (1994) *Designing Social Inquiry: Scientific Inference in Qualitative Methods*, Princeton, N.J.: Princeton University Press
- King, R. (1994) 'The Institutional Compact', in Bocock, J. & Watson, D. (eds.) *Managing the University Curriculum: Making Common Cause*, Buckingham, OUP/SRHE
- Kogan, M., Bauer, M., Bleiklie, I. and Henkel, M. (eds.) (2006) *Transforming Higher Education: a Comparative Study*, 2nd ed, Dordrecht: Springer
- Kohoutek, J. (2013) 'Three Decades of Implementation Research in Higher Education: Limitations and Prospects of Theory Development', *Higher Education Quarterly* 67(1): 56-79
- Kurtmollaiev, S., Fjuk, A., Pedersen, P., Clatworthy, S., & Kvale, K. (2017) 'Organizational Transformation Through Service Design: The Institutional Logics Perspective', *Journal of Service Research*, 21(1): 59-74
- Laurillard, D. (2012) *Teaching as a Design Science: Building Pedagogical Patterns for Learning and Teaching*, Abingdon: Routledge
- Lawrence, T.B. & Suddaby, R. (2006) 'Institutions and Institutional work' in: S.R. Clegg, C. Hardy, T.B. Lawrence & W.R. Nord (eds.) *Sage Handbook of Organization Studies*, 2nd Edition, London: Sage

- Lepori, B. (2016) 'Universities as Hybrids: Applications of Institutional Logics Theory to Higher Education', in J. Huisman, & M. Tight (eds.) *Theory and Method in Higher Education Research*, Vol. 2, Emerald Group Publishing Limited, p.245-264
- Liedtka, J. & Ogilvie, T. (2011) *Designing for Growth: A Design Thinking Toolkit for Managers*, New York: Columbia Business School Publishing
- Light, G., Cox, R. & Calkins, S. (2009) *Learning and Teaching in Higher Education: The Reflective Professional*, 2nd Ed., London: Sage
- Lipsky, M. (2010[1980]) *Street-Level Bureaucracy: Dilemmas of the Individual in Public Services*, New York: Russell Sage
- Løkke, A-K. & Sørensen, P.D. (2014) 'Theory Testing Using Case Studies', *The Electronic Journal of Business Research Methods*, 12(1): 66-74
- Lynn, L.E. & Robichau, R.W. (2013) 'Governance and organisational effectiveness: towards a theory of government performance', *Journal of Public Policy*, 33(2): 201-228
- Mackh, B.M. (2018) *Higher Education by Design: Best Practices for Curricular Planning and Instruction*, Abingdon: Routledge
- MacLaren, I. (2012) 'The contradictions of policy and practice: creativity in higher education', *London Review of Education*, 10(2): 159-172
- Manzini, E. (2015) *Design, When Everybody Designs: An Introduction to Design for Social Innovation*, Cambridge Mass: MIT Press
- Marginson, S. (2008) Academic Creativity Under New Public Management: Foundations for an Investigation, *Educational Theory* 58(3): 269-287
- Medlicott, D. (2009) *How to Design and Deliver Enhanced Modules: A Case Study Approach*, Maidenhead: OUP
- Meyer, J. W., Ramirez F. O., Frank D. J., & Schofer, E. (2007) 'Higher Education as an Institution', in P. J. Gumpert (ed.) *Sociology of Higher Education: Contributions and Their Contexts*, 187–221, Baltimore: Johns Hopkins University Press
- Micheli, P., Wilner, S.J.S., Bhatti, S.H., Mura, M. & Beverland, M.B. (2019) 'Doing Design Thinking: Conceptual Review, Synthesis, and Research Agenda', *Journal of Product Innovation Management* 36(2): p.124-148
- Molesworth, M., Scullion, R. & Nixon, E. (eds.) (2011) *The Marketisation of Higher Education and the Student as Consumer*, Abingdon: Routledge
- Morley, L. (2003) *Quality and Power in Higher Education*, Buckingham: OUP/SRHE
- Mortati, M. (2015) 'A Framework for Design Innovation: Present and Future Discussions', *Design Issues* 31(4): 4-16
- Musselin, C. (2006) 'Are Universities specific organisations?', in Krücken G., Kosmützky A. et Torka M. (eds.) *Towards a Multiversity? Universities between Global Trends and national Traditions*, Bielefeld: Transcript Verlag, pp. 63-84
- Musselin, C. & Teixeira, P. (2013) *Reforming Higher Education: Public Policy Design and Implementation*, Dordrecht: Springer
- Office for Students (2018) *Securing student success: Regulatory framework for higher education in England*, London: HMSO

- O'Neill, G. and McMahon, T. (2005) 'Student-centred learning: What does it mean for students and lecturers?', in *Emerging issues in the practice of university learning and teaching I*. Dublin: AISHE
- Osborne, S. (2010) 'The (New) Public Governance: a suitable case for treatment?', in S. Osborne (ed.) *The New Public Governance?: Emerging Perspectives on the Theory and Practice of Public Governance*, Abingdon: Routledge
- Panke, S. (2019) 'Design Thinking in Education: Perspectives, Opportunities and Challenges', *Open Education Studies*, 2019(1): 281–306
- Powell, W.W. & DiMaggio, P.J. (1991) *The New Institutionalism in Organizational Analysis*, Chicago: University of Chicago Press
- Prajago, D.I. & Sohal, A.S. (2001) 'TQM and innovation: a literature review and research framework', *Technovation* 21, p.539-558
- Radnor, Z., Osborne, S.P., Kinder T. & Mutton, J. (2014) 'Operationalizing Co-Production in Public Services Delivery: The contribution of service blueprinting', *Public Management Review*, 16(3): 402-423
- Reigeluth, C.M., Beaty, B.J. & Myers, R.D. (2016) *Instructional Design Theories and Models: The Learner-Centred Paradigm of Education*, New York: Routledge
- Reynolds, J. & Saunders, M. (1987) 'Teacher Responses to Curriculum Policy: Beyond the 'Delivery' Metaphor', in J. Calderhead (ed.) *Exploring Teachers' Thinking*, London: Continuum
- Riccucci, N. (2005) *How Management Matters: Street-Level Bureaucrats and Welfare Reform*, Washington, DC: Georgetown University Press
- Roberts, G. & Macdonald, A.S. (2017) 'Co-design, organizational creativity and quality improvement in the healthcare sector: 'Designerly' or 'Design-like'?', in D. Sangiorgi & A. Prendiville (eds.) *Designing for Service: Key Issues and New Directions*, London: Bloomsbury
- Sandfort, J. & Moulton, S. (2015) *Effective Implementation in Practice: Integrating Public Policy and Management*, San Francisco: Wiley
- Schmiedgen, J., Rhinow, H., Köppen, E., & Meinel, C. (2015) *Parts Without a Whole? – The Current State of Design Thinking Practice in Organizations* Potsdam: Hasso-Plattner-Institut für Softwaresystemtechnik an der Universität Potsdam
- Schneider, A. & Ingram, H. (1990) 'Behavioral Assumptions of Policy Tools', *The Journal of Politics* 52(2): 510-529
- Schön, D. (1991[1983]) *The Reflective Practitioner: How Professionals Think in Action*, Farnham: Ashgate
- Scott, W.R. (2014) *Institutions and Organisations*, 4<sup>th</sup> ed, Los Angeles: Sage
- Seeber, M., Lepori, B., Montauti, M., Enders, J., de Boer, H., Wyer, E., Bleiklie, I., Hope, K., Michelsen, S., Nyhagen, G.M., Frolich, N., Scordato, L., Stensaker, B., Waagene, E., Dragsic, Z., Kretek, P., Krucken, G., Magalhaes, A., Ribeiro, F.M., Sousa, S., Veiga, A., Santiago, R., Marini, G. & Reale, E. (2015) 'European Universities as Complete Organisations? Understanding Identity, Hierarchy and Rationality in Public Organisations', *Public Management Review* 17(10): 1444-1474
- Shields, R. & Watermeyer, R. (2020) 'Competing institutional logics in universities in the United Kingdom: schism in the church of reason', *Studies in Higher Education*, 45(1): 3-17
- Simon, H. (1996) *The Sciences of the Artificial*, Cambridge Mass: MIT Press



- Spicer, A. & Sewell, G. (2010) 'From National Service to Global Player: Transforming the Organizational Logic of a Public Broadcaster', *Journal of Management Studies*, 47(6): 913-943
- Temple, P. (2014) *The Hallmark University: Distinctiveness in higher education management*, London: Institute of Education Press
- Tierney, W.G. & Lanford, M. (2016) 'Conceptualizing Innovation in Higher Education' in M.B. Paulson (ed.) *Higher Education: Handbook of Theory and Research* Vol 31, Dordrecht: Springer
- Thornton, P. H., & Ocasio, W. (2008) 'Institutional Logics', in R. Greenwood, C. Oliver, K. Sahlin, and R. Suddaby (eds.) *Handbook of Organizational Institutionalism*, 99–129, Thousand Oaks, CA: Sage
- Tight, M. (2012) *Researching Higher Education*, 2<sup>nd</sup> Ed, Maidenhead: SRHE/OUP
- Toohey, S. (1999) *Designing Courses for Higher Education*, Buckingham: SRHE/OUP
- Trow, M. (1973) *Problems in the Transition from Elite to Mass Higher Education*, Carnegie Commission on Higher Education
- Trowler, P. (2002) 'Introduction: Higher Education Policy, Institutional Change', in P. Trowler (ed.) *Higher Education Policy and Institutional Change*, Buckingham: OUP/SRHE
- Trowler, P. & Knight, P. (2002) *Exploring the Implementation Gap: Theory and Practices in Change Interventions*, in P. Trowler (ed.) *Higher Education Policy and Institutional Change*, Buckingham, OUP/SRHE
- van Buren, A., Lewis, J.M., Guy Peters, B., Voorberg, W. (2020) 'Improving public policy and administration: exploring the potential of design', *Policy & Politics*, 48(1): 3-19
- Veblen, T. (2015[1918]) *The Higher Learning in America: The Annotated Edition: A Memorandum on the Conduct of Universities by Business Men*, R.F. Teichgraeber III (ed.), Baltimore: Johns Hopkins Press
- Vinsel, L. (2017) 'Design Thinking is Kind of Like Syphilis — It's Contagious and Rots Your Brains', *Medium*, last accessed online 3/6/2020
- Vinsel, L. (2018) 'Design Thinking is a Boondoggle', *Chronicle of Higher Education*, May 2018, Washington D.C.
- Wakeham, W. (2016) *Wakeham Review of STEM Degree Provision and Graduate Employability*, London: HMSO
- Wenger, E. (1998) *Communities of Practice: Learning, Meaning and Identity*, Cambridge: CUP
- Yin, R.K. (2003) *Case Study Research: Design and Methods*, 3rd Ed, London: Sage

## List of abbreviations used in the text

BEIS	[Department for] Business, Energy, and Industrial Strategy
BIS	[Department for] Business, Innovation, and Skills
BTEC	Business and Technology Education Council
DfE	Department for Education
DLHE	Destination of Leavers from Higher Education [Survey]
HEFCE	Higher Education Funding Council for England
HEI	Higher Education Institution
HESA	Higher Education Statistics Agency
IfATE	Institute for Apprenticeships and Technical Education
LEO	Longitudinal Education Outcomes
NPM	New Public Management
OFQUAL	Office of Qualifications and Examinations Regulation
OfS	Office for Students
QA	Quality Assurance
QAA	Quality Assurance Agency
SCL	Student-Centred Learning
STEM	Science, Technology, Engineering, and Mathematics
TEF	Teaching Excellence Framework
T-Level	Technical Level
TRUE	Transformation of Universities in Europe
UK	United Kingdom

## Appendix A: Interview topic guides

### Topic Guide – Interviews with Programme Developers

**Research aim:** to understand how programme design functions as a practice in a contemporary higher education system, and how it is affected by relevant public policies.

#### Part A: Introductory

Welcome, introduction of researcher and the status of the research project.

*“This project is concerned with developing our understanding of programme design, the extent to which it’s part of your role, how you do it, what factors affect how you do it, and whether any of this has changed or remained the same in recent times”.*

Invite the participant to read and consider the participant information sheet and to complete the consent for participation form.

Warm up question: *could you tell me in your own words about any recent examples of undergraduate programmes you have created, and how it/they came into being?* (participants have been selected on the basis that they have done this kind of work in the last two years)

#### Part B: Exploratory

A set of questions designed to explore the research issues in more depth. Any of the questions may be amenable to follow-up questions and the order may change depending on how the framing of the answer in the warm-up question.

*How much of your role would you say was given over to programme design?*

*Has this aspect of your role changed in the last few years, or is it the same?*

*When you are conceiving a new degree course, what’s your starting point?*

*What influences your approach to designing programmes?*

*What factors do you take into account when designing a new programme? How do you balance them?*

*Are there any design ‘rules’ you have to follow? How does this affect the process?*

*Do you take into account things that are going on in other departments of the institution? (noting that this might include academic and/or professional service departments)*

*What constraints are there on your programme design approach?*

*Who would you consider to be the main users of your programme, and how do you take into account their needs in the design process?*

*How do you judge whether aspects of the programme design were successful or unsuccessful?*

*Are you influenced by programmes you have seen in other institutions?*

#### Part C: Closing

Two more open questions to bring the interview to a close.

*Has our conversation provoked any thoughts about this topic that you would like to talk about?*

*Is there anything else you would like to add?*

Thank the participant for their help with the project and remind them about relevant contact information should they wish to follow-up or raise any concerns.

## Topic Guide – Interviews with University Senior Managers / Lead Support Staff

**Research aim: to understand how programme design functions as a practice in a contemporary higher education system, and how it is affected by relevant public policies.**

### Part A: Introductory

Welcome, introduction of researcher and the status of the research project.

*“This project is concerned with developing our understanding of programme design, your role in relation to it, what factors affect how it done in this institution, and whether any of this has changed or remained the same in recent times”.*

Invite the participant to read and consider the participant information sheet and to complete the consent for participation form.

Warm up question: *when new undergraduate programmes are created here, how in general does that happen; what does the process look like from your perspective?* (participants have been selected on the basis that their institution has done this in the last two years)

### Part B: Exploratory

A set of questions designed to explore the research issues in more depth. Any of the questions may be amenable to follow-up questions and the order may change depending on how the framing of the answer in the warm-up question.

*What is your role in relation to programme design work in this institution?*

*Has the institution’s approach to this changed in the last few years, or is it the same?*

*Do you ask academic staff members to consider any particular factors when designing new programmes? (noting these could be internal or external factors)*

*Do you consider the way programmes are designed to be an important factor in institutional marketing and student recruitment?*

*What interest do you find external agencies have in your programme design activity?*

*Do you impose any design ‘rules’ through management? How does this affect the process?*

*Do you take a uniform approach across all departments of the institution?*

*What is the role of professional service departments in this?*

*What constraints are there on the programme design approach? How do you manage them?*

*Who would you consider to be the main users of your programmes, and how do you take into account their needs in the design process?*

*How do you judge whether programme designs were successful or unsuccessful?*

*Do you recognise design activity as a distinct professional practice within the institution? What role does it play in career development, and how do you support people to develop their skills?*

### Part C: Closing

Two more open questions to bring the interview to a close.

*Has our conversation provoked any thoughts about this topic that you would like to talk about?*

*Is there anything else you would like to add?*

Thank the participant for their help with the project and remind them about relevant contact information should they wish to follow-up or raise any concerns.

## Appendix B: Data coding scheme extracted from NVivo

Name	Files	References
ALL	0	0
Contextual themes	0	0
Conceiving new programmes - starting points	18	34
Institutional positioning & strategic innovation	16	63
Market research & analysis	18	36
Programme approval processes	14	31
Design practice factors (addressing RQ1)	0	0
Clear references to design methods	19	76
Unpacking design approaches	0	0
Institutional 'hallmarks'	18	36
Practice - Centralised vs devolved	19	80
Practice - Individual work vs team work	20	53
Practice - Interdisciplinary collaboration	5	14
Practice - Metric analysis	11	23
Practice - Professional recognition and development	20	63
Practice - Rapid or agile development	9	15
Programmes - Course structure; choice vs coherence	16	43
Programmes - Education technology	12	41
Programmes - Quality assurance	17	38
Programmes - 'Real-world learning'	12	21
Programmes - Resourcing issues	18	44
Programmes - Student assessment	15	27
Programmes - Student workstyles and workload	6	10
User engagement - employers	15	38
User engagement - students	16	37
Student diversity as a design factor	10	27
Policy environment factors (addressing RQ2)	0	0
Attainment gaps	5	13
Funding	8	10
General 'political climate'	6	9
Government imposing direct programme demands or rules	9	23
LEPs	2	2
Professional bodies	10	19
Regulation - OfS, CMA, professional regulation	10	24
TEF inc. satisfaction, retention, outcomes	18	52
Value for money	4	4
Wider reflective narratives	0	0
Changing practice	8	27
Visions and ideas for the future	12	26

## **Appendix C: Research ethics approval application form**

Follows on subsequent pages.

SPS REC Ref:

**SPS RESEARCH ETHICS  
APPLICATION FORM: STAFF and DOCTORAL STUDENTS**

- This proforma must be completed for each piece of research carried out by members of the School for Policy Studies, both staff and doctoral postgraduate students.
- See the Ethics Procedures document for clarification of the process.
- All research **must** be ethically reviewed before any fieldwork is conducted, regardless of source of funding.
- See the School's policy and guidelines relating to research ethics and data protection, to which the project is required to conform.
- Please stick to the word limit provided. **Do not attach** your funding application or research proposal.

**Key project details:**

1. Proposer's Name	<input type="text" value="Graeme Wise"/>		
2. Proposer's Address:	Email	<input type="text" value="ptgbw@bris.ac.uk"/>	
3. Project Title	<input type="text" value="Theorising programme design in higher education (DSocSci dissertation)"/>		
4. Project Start Date:	<input type="text" value="Feb 2019 (fieldwork)"/>	End Date:	<input type="text" value="Oct 2019"/>

**Who needs to provide Research Ethics Committee approval for your project? SPS REC only**

The SPS REC will only consider those research ethics applications which do not require submission elsewhere. As such, you should make sure that your proposed research does not fall within the jurisdiction of the NRES system:

<http://www.nres.nhs.uk/applications/approval-requirements/ethical-review-requirements/>

If you are not sure where you should apply please discuss it with either the chair of the Committee or the Faculty Ethics Officer who is based in RED.

Currently NRES are not expected to consider applications in respect of activities that are not research: i.e. clinical audit, service evaluation and public health surveillance. In addition REC review is not normally required for research involving NHS or social care staff recruited as research participants by virtue of their professional role. Social care research projects which are funded by the Department of Health, must always be reviewed by a REC within the Research Ethics Service for England. Similarly research which accesses unanonymised patient records must be reviewed by a REC and NIGB.

**Who needs to provide governance approval for this project? No external approval required.**

If this project involves access to patients, clients, staff or carers of an NHS Trust or Social Care Organisation, it falls within the scope of the Research Governance Framework for Health and Social. You will also need to get

written approval from the Research Management Office or equivalent of each NHS Trust or Social Care Organisation.

**When you have ethical approval, you will need to complete the research registration form:**

<http://www.bristol.ac.uk/red/research-governance/registration-sponsorship/study-notification.html>

Guidance on completing this form can be found at: <http://www.bristol.ac.uk/red/research-governance/registration-sponsorship/guidance.pdf>

Contact the Research Governance team (<http://www.bristol.ac.uk/red/people/group/red/1602>) for guidance on completing this form and if you have any questions about obtaining local approval.

**Do you need additional insurance to carry out your research? No.**

Whilst staff and doctoral students will normally be covered by the University's indemnity insurance there are some situations where it will need to be checked with the insurer. If you are conducting research with: Pregnant research subjects or children under 5 you should email: [insurance-enquiries@bristol.ac.uk](mailto:insurance-enquiries@bristol.ac.uk)  
In addition, if you are working or travelling overseas you should take advantage of the university travel insurance.

**Do you need a Disclosure and Barring Service check? No.**

The Disclosure and Barring Service (DBS) replaces the Criminal Records Bureau (CRB) and Independent Safeguarding Authority (ISA). Criteria for deciding whether you require a DBS check are available from: <https://www.gov.uk/government/organisations/disclosure-and-barring-service/about>

You should specifically look at the frequency, nature, and duration of your contact with potentially vulnerable adults and or children. If your contact is a one-off research interaction, or infrequent contact (for example: 3 contacts over a period of time) you are unlikely to require a check.

If you think you need a DBS check then you should consult the University of Bristol web-page:

<http://www.bris.ac.uk/secretary/legal/disclosure/crbhome>

5. If your research project requires REC approval elsewhere please tell us which committee, this includes where co-researchers are applying for approval at another institution. Please provide us with a copy of your approval letter for our records when it is available. **N/A**

6. Have all subcontractors you are using for this project (including transcribers, interpreters, and co-researchers not formally employed at Bristol University) agreed to be bound by the School's requirements for ethical research practice?

Yes	<input checked="" type="checkbox"/>
No/Not yet	<input type="checkbox"/>
Not applicable	<input type="checkbox"/>

Note: You must ensure that written agreement is secured before they start to work. They will be provided with training and sign a detailed consent form.



7. If you are a PhD/doctoral student please tell us the name of your research supervisor.		
Dr. Kevin Doogan & Prof. Alex Marsh		
Has your supervisor seen this final versions of your ethics application?		
Yes	<input checked="" type="checkbox"/>	
No	<input type="checkbox"/>	

8. Who is funding this study?		
Self funded via DSocSci programme		

If this study is funded by the ESRC or another funder requiring lay representation on the ethics committee and is being undertaken by a member staff, this form should be submitted to the Faculty REC.

Post-graduate students undertaking ESRC funded projects should submit their form to the SPS Committee.

9. Is this application part of a larger proposal?		
No	<input checked="" type="checkbox"/>	
Yes	<input type="checkbox"/>	
If yes, please provide a summary of the larger study and indicate how this application relates to the overall study.		

10. Is this proposal a replication of a similar proposal already approved by the SPS REC? Please provide the SPS REC reference number.		
No	<input checked="" type="checkbox"/>	
Yes	<input type="checkbox"/>	
If Yes, please tell us the name of the project, the date approval was given and code (if you have one).		
Please describe any differences (such as context) in the current study. If the study is a replication of a previously approved study. Submit these first two pages of the form.		

# ETHICAL RESEARCH PROFORMA

The following set of questions is intended to provide the School Research Ethics Committee with enough information to determine the risks and benefits associated with your research. You should use these questions to assist in identifying the ethical considerations which are important to your research. You should identify any relevant ethical issues and how you intend to deal with them. Whilst the REC does not comment on the methodological design of your study, it will consider whether the design of your study is likely to produce the benefits you anticipate. **Please avoid copying and pasting large parts of research bids or proposals which do not directly answer the questions.** Please also avoid using *unexplained* acronyms, abbreviations or jargon.

**1. IDENTITY & EXPERIENCE OF (CO) RESEARCHERS:** Please give a list of names, positions, qualifications, previous research experience, and functions in the proposed research of all those who will be in contact with participants

As a doctoral candidate, I am the sole researcher. I have previously conducted interviews for professional purposes and have passed the relevant research methods modules of my DSocSci programme with strong grades.

**2. STUDY AIMS/OBJECTIVES [maximum of 200 words]:** Please provide the aims and objectives of your research.

The overall research aim is to better understand the influences on programme design in higher education, where those influences come from several different layers in the higher education system, and to test and improve related theories. Programme design is considered as the intentional structuring of students' course of learning through a range of pedagogical, curricular and ancillary decisions. The study aims to answer three research questions. How is higher education programme influenced by professional practice ('micro action'), institutional management and governance ('meso action'), and public policy ('macro action') in a contemporary higher education system? What implications does this have for extant theories accounting for the relative influence of these fields of strategic action? How might these findings contribute to an improved theory of design in higher education settings?

## **RESEARCH WITH HUMAN PARTICIPANTS**

(If you are undertaking secondary data analysis, please proceed to section 11)

**3. RESEARCH METHODS AND SAMPLING STRATEGY [maximum of 300 words]:** Please tell us what you propose to do in your research and how individual participants, or groups of participants, will be identified and sampled. Please also tell us what is expected of research participants who consent to take part (Please note that recruitment procedures are covered in question 8)

The study uses purposive sampling driven by its theoretical framework - the sampling strategy is to collect data from participants working on (or with a professional perspective on) higher education programme design at multiple levels in the same higher education system. For example, this will involve data collection from an academic who leads programme design within their department, a senior manager (e.g. faculty dean or PVC academic or equivalent), professional support managers focused on learning and teaching, etc, within the same institutional setting. Sampling is therefore expected to have a 'snowball' element where a lead at one level opens up connections to the others. Participants will be aware of each others participation. The aim is to conduct this sampling approach in four separate institutional settings; participants will not be aware of participants in other institutions. An additional

sample of policy leaders will be conducted as a second phase, and on a different basis - here the participants will be identified individually on the basis of a formal role they hold (or held) in the learning and teaching policy field, as part of a government department or agency or connected to them. These participants will not be aware of each others participation. For all participants under both sampling strategies, the expectation will be for one approximately hour-long interview.

**4. EXPECTED DURATION OF RESEARCH ACTIVITY:** Please tell us how long each researcher will be working on fieldwork/research activity. For example, conducting interviews between Feb 12 – July 2016. Also tell us how long participant involvement will be. For example: Interviewing 25 professional participants X2 for a maximum of 1 hour per interview.

The envisaged window of fieldwork activity will be between late February 2019 and June 2019. Assuming approval to conduct fieldwork is obtained in mid-January, the plan would be to proceed immediately to recruit participants, with the intention of being able to begin interviews about one month later (though it is acknowledged not all participants may have been found at this point). The intended interview schedule will comprise of 3-4 interviews in four institutional settings, either conducted in person on an institutional visit, or by telephone with participants. Towards the end of the fieldwork period, there will be an additional phase of 3-4 interviews with policy leaders connected to learning and teaching policy.

**5. POTENTIAL BENEFITS AND TO WHOM: [maximum 100 words]** Tell us briefly what the main benefits of the research are and to whom.

The envisaged benefits of the the research are in supporting improved practice by university staff with programme design responsibilities, by senior managers in higher education who have oversight of learning and teaching strategy, and by policy-makers working on relevant issues in higher education policy development. The research aims to provide these stakeholders with improved insight into the way in which front-line practice, management and governance, and public policy interact to shape emergent HE programmes. There is also an envisaged benefit to scholarship in higher education studies crossing a number of sub-fields.

**6. POTENTIAL RISKS/HARM TO PARTICIPANTS [maximum of 100 words]:** What potential risks are there to the participants and how will you address them? List any potential physical or psychological dangers that can be anticipated? You may find it useful to conduct a more formal risk assessment prior to conducting your fieldwork. The University has an example of risk assessment form: <http://www.bristol.ac.uk/safety/policies/>

RISK	HOW IT WILL BE ADDRESSED
<p>Risk of professional embarrassment or disclosure of competitively sensitive material (the realities of higher education under stronger market conditions may mean greater jeopardy for HE staff in discussing their approaches with external researchers and/or having this published).</p>	<p>Primarily by anonymisation. The study requires case studies drawn from four universities; within the English system there is considerable scope to describe those institutions without identifying them, as each one will have several similar counterparts that are not in the study. Individuals will be identified using generic descriptors or pseudonyms and not specific post titles, which may be disclosive.</p> <p>It is acknowledged that it may be harder to protect the anonymity of participants who are or were officials in public agencies or in key policy steering roles. This risk will be highlighted to individuals at the point that informed consent is requested.</p>

\*Add more boxes if needed.

<p><b>7. RESEARCHER SAFETY [maximum of 200 words]:</b> What risks could the researchers be exposed to during this research project? If you are conducting research in individual's homes or potentially dangerous places then a researcher safety protocol is mandatory. Examples of safety protocols are available in the guidance.</p>	
<b>RISK</b>	<b>HOW IT WILL BE ADDRESSED</b>
The nature of this project does not raise any researcher safety issues. All contact with participants will be in professional and quasi-public settings.	N/A

<p><b>8. RECRUITMENT PROCEDURES [maximum of 400 words]:</b> How are you going to access participants? Are there any gatekeepers involved? Is there any sense in which respondents might be "obliged" to participate (for example because their manager will know, or because they are a service user and their service will know), if so how will this be dealt with.</p>	
	<p>Participants in the first phase (institutional settings) will be sought initially by means of an advertising email circulated via relevant professional networks. These network lists would include, for example, those set up to improve connections between learning and teaching staff in universities. I, as the researcher, have access to some networks through my own employer, as well as several relationships with colleagues in other HE sector bodies that may assist in circulation of this call for participants. In all cases it will be made clear that the study is being conducted as independent doctoral research and is not linked to any particular HE sector body. While it is hoped that this call for participants will generate a pool of candidates from which four institutions will be selected (in line with the purposive sampling strategy), it is acknowledged that it may not do so and in this eventuality potential participants will be approached (starting with the most senior potential participant within a potential cluster). The risk of restrictive 'gatekeeping' does arise, but it is helpful here that the research design calls for participation at multiple levels within an institution; this may mean that there is mitigation of the chances that the study is viewed with suspicion at one level or another. It is implicit in the research design that all those in a 'cluster' mutually agree to participate, in addition to informed consent at the individual level. Participants in the second phase (policy leaders) will be approached directly on the basis of their current or past involvement in relevant policy work; these participants are unlikely to be subject to gatekeeping or obligation problems.</p>

<p><b>9. INFORMED CONSENT [maximum of 200 words]:</b> How will this be obtained? Whilst in many cases written consent is preferable, where this is not possible or appropriate this should be clearly justified. An age and ability appropriate participant information sheet (PIS) setting out factors relevant to the interests of participants in the study must be handed to them in advance of seeking consent (see materials table for list of what should be included). If you are proposing to adopt an approach in which informed consent is not sought you must explain in detail why this is not considered to be appropriate. If you are planning to use photographic or video images in your method then additional specific consent should be sought from participants.</p>	
	<p>Written informed consent will be obtained via consent forms for all participants. In general, an advantage of the study is that all participants do work professionally in fields that require a clear prior knowledge of research practice and informed consent.</p>
<p>Please tick the box to confirm that you will keep evidence of the consent forms (either actual forms or digitally scanned forms), securely for twenty years.</p>	<input checked="" type="checkbox"/>

10. If you intend to use an on-line survey (for example Survey Monkey) you need to ensure that the data will not leave the European Economic Area i.e. be transferred or held on computers in the USA		
	Please tick the box to confirm that you will not use any on-line survey service based in the USA or outside the European Economic Area (EEA).	<input checked="" type="checkbox"/>

11. <b>DATA PROTECTION:</b> All applicants should regularly take the data protection on-line tutorial provided by the University in order to ensure they are aware of the requirements of current data protection legislation. University policy is that "personal data can be sent abroad if the data subject gives unambiguous written consent. Staff should seek permission from the University Secretary prior to sending personal data outside of the EEA". Any breach of the University data protection responsibilities could lead to disciplinary action.		
Have you taken the mandatory University data protection on-line tutorial in the last 12 months? <a href="https://www.bris.ac.uk/is/media/training/uobonly/datasecurity/page_01.htm">https://www.bris.ac.uk/is/media/training/uobonly/datasecurity/page_01.htm</a>		
Yes	<input checked="" type="checkbox"/>	
No	<input type="checkbox"/>	

Do you plan to send any information/data, which could be used to identify a living person, to anybody who works in a country that is not part of the European Union?  
See [http://www.ico.gov.uk/for\\_organisations/data\\_protection/the\\_guide/principle\\_8.aspx](http://www.ico.gov.uk/for_organisations/data_protection/the_guide/principle_8.aspx)

No	<input checked="" type="checkbox"/>	
Yes	<input type="checkbox"/>	If YES please list the country or countries:

Please outline your procedure for data protection. It is University of Bristol policy that interviews must be recorded on an encrypted device. Ideally this should be a University owned encrypted digital recorder (see <a href="http://www.bristol.ac.uk/infosec/uobdata/transcription/">http://www.bristol.ac.uk/infosec/uobdata/transcription/</a> )	
It is University of Bristol policy that data is stored in an anonymised format for future use by other researchers (see <a href="http://data.bris.ac.uk/">http://data.bris.ac.uk/</a> ). What level of future access to the anonymised data will there be:	
<ul style="list-style-type: none"> <li>● Open access</li> <li>● Restricted access - what restrictions?</li> <li>● Closed access - on what grounds?</li> </ul>	
Open access.	

12. CONFIDENTIALITY AND ANONYMITY		Yes	No
	All my data will be stored on a password protected server	✓	
	I will only transfer unanonymised data if it is encrypted. (For advice on encryption see: <a href="http://www.bristol.ac.uk/infosec/uobdata/encrypt/device/">http://www.bristol.ac.uk/infosec/uobdata/encrypt/device/</a> )	✓	
	If there is a potential for participants to disclose illegal activity or harm to others you will need to provide a confidentiality protocol.		
	Please tick the box to <b>CONFIRM</b> that you warned participants on the information and consent forms that there are limits to confidentiality and that at the end of the project data will be stored for 20 years on appropriate storage facility. <a href="https://www.acrc.bris.ac.uk/acrc/storage.htm">https://www.acrc.bris.ac.uk/acrc/storage.htm</a>	✓	

Please outline your procedure for ensuring confidentiality and anonymity.

Interviews to be recorded to an encrypted digital recorder or a mobile phone in line with the university's policy at <http://www.bris.ac.uk/infosec/uobdata/transcription/>. These recordings may be made in person or in the case of telephone interviews directly onto the device using a call recorder. Files will be transferred as soon as practical to the university's own servers, and deleted locally from the mobile device. Backups will be made to an encrypted USB device specified by the university and kept in a secure location. Recordings will be transferred for transcription to a university-approved transcription service. Non-anonymised transcriptions will be stored on university servers and processed there to achieve anonymisation, and only then transferred to a local computer for analysis.

## Theorising Programme Design in Higher Education: Participant Information Sheet

Thank you for considering participation in this research project. The project is an investigation into what influences the activity of 'programme design' in higher education. It aims to understand design practice in higher education and how it is influenced by different factors and pressures. It is hoped the research will make a positive contribution to higher education scholarship and support enhanced practice, and the insights drawn from participants in the study is expected to be very valuable to the study.

This is a doctoral research project being conducted in the School for Policy Studies at the University of Bristol. The research procedure for this study has been approved by the SPS School Ethics Committee. The researcher's name is Graeme Wise.

You have been selected as a participant because it is anticipated you will be able to give views and insights on programme design from a specific perspective. The aim is to document views from people involved in the process at different levels and in different ways. You will not be the only person in the study who offers this perspective, and a key element of the research is to compare across different institutional settings.

There are some important facts you should know before participating in this study:

- Participation is by interview. This is expected to be a single interview of approximately one hour in duration, conducted by one researcher. This will be arranged in a location convenient for you, or conducted by telephone.
- Participation is voluntary. You can decline to take part in the study prior to interview. You will be asked to give your consent to participate on a consent form (attached). You can stop an interview at any point.
- Your data will be secured. Interviews will be recorded on an encrypted recording device and the recorded audio will then be transferred onto the University of Bristol's secure servers. They will be transcribed by a professional transcription service approved by the University for data protection and security standards. All the provisions of the Data Protection Act 2018 apply.
- Your data will be anonymised prior to analysis and inclusion in the final report. You will be identified only by means of a pseudonym and generic description of your role. Only the researcher, the researcher's supervisors, and any colleagues at your own institution who are also participants in the study (or involved in arranging participation) will be aware of your participation.
- The final product of this research will be published, initially in the library of the University of Bristol and in related repositories online. It will also be made available to participants after it has been examined. The anonymised interview transcripts will also be made available in relevant repositories to support future research by others.

If you require verification of this study, or wish to make any comments or complaints about the research, these may be directed in the first instance to Dr. Kevin Doogan, School for Policy Studies, University of Bristol, BS8 1TZ or [kevin.dooqan@bris.ac.uk](mailto:kevin.dooqan@bris.ac.uk).